Editorial

Post 9/11: How Does an American Vedantist Respond?

Recent extraordinary events challenge citizens everywhere to re-examine basic assumptions about the world they live in and the values they live by. This is no less true for citizens who are also spiritual aspirants. Our basic spiritual commitment has not changed, but how do we bring that commitment to bear on the changed circumstances of our nation and our own lives?

One aspect of recent events is the fear, the feeling of insecurity that the terrorist attacks have prompted. Can anyone forget the sight of the 110-story twin towers crumpling, as if they were made of dust and straw? And who knows who will be the next victims of bio-terrorism? With a spiritual perspective, we seek strength and assurance both in prudent measures for civic and national defense, and in more intangible things such as healthy habits of thought, daily interior practices, breaking out of our ego shells and serving others, thinking in terms of the welfare of others, joining with others to accomplish necessary tasks and shared goals.

Changed circumstances call for changed actions, and the times urge us as Vedantists and as Americans to reach out to our fellow citizens, uniting in practical ways for the common defense. For instance, we can learn from our local Emergency Management Agency what we can do in our homes, on our blocks, in our neighborhoods, through our Vedanta centers, to be prepared for untoward events, to be helpful to our neighbors, and to be of service to our cities or towns.*

One area where Vedantists are particularly well-positioned to help strengthen our society is interfaith solidarity. For Vedantists, respect for the

* In the phone book under Government Listings, by city or by county, look for **Emergency Management Agency**, or for **Civil Defense** or **Civil Preparedness**. They will be glad to hear from you and to tell you what to do as a family or as a neighborhood. They are willing to send you literature, and will even send a speaker for your group. They will also be grateful for the offer of your Vedanta center to nucleate care for those with "unmet needs." Churches in general are used as emergency shelters and as food and medicine distribution locations. Our centers can also be useful in organizing their neighborhoods for unexpected situations so that the elderly and disabled people are known and people who can assist them are known. Some communities may also have coalitions of volunteer organizations, including religious congregations, businesses, and service clubs for addressing such needs, and a Vedanta center can belong to that.

religious beliefs and practices of others is a central pillar of our religious identity. We can reach out to others in all faiths, form neighborhood prayer or meditation groups to promote understanding and justice, to fight against hate and intolerance, to find common strength in affirmation of the spiritual dimension of human life, and thus help to create a solid wall against fanaticism, bigotry and fear.

Then there is the issue of war itself. Should war be engaged? Is war itself necessarily evil? How should we fight? According to the Gita and also Swami Vivekananda, war may be a duty under certain circumstances. As long as there is evil in society, in the world, actions will have to be undertaken to counteract that evil. How and whether one fights will depend on the circumstances of one's life. For the person who has completely renounced ordinary life and completely depends on God, and who has no dependents, non-violence, non-resistance may be appropriate.

However, according to Sri Ramakrishna, even a renunciate may "hiss" to frighten those who would injure him or her. And for those living in society, with dependents and responsibilities, evil has to be actively resisted, with violence if necessary, *but without hatred*. "Fight," Krishna tells Arjuna, "without mental fever." How can we avoid hating those who attack us? We can strive to conquer hatred by remembering that we are all the victims of our own unredeemed minds. Those who act viciously are doing so because they are imprisoned by the contents of their minds.

On the other hand, there are those like Mahatma Gandhi, who would interpret the Gita differently, as advocating resistance but not necessarily violence. For some individuals and under certain circumstances, non-violent resistance may indeed be the right course of action. For one with Gandhi's deeply held convictions, it is no doubt the correct path.

An external challenge can act as a friend to urge us to vigorously renew our spiritual practices. It can shake us out of any tendency to sink into what Swami Sarvagatananda calls "reverential insensibility." Let us respond to the present changed circumstances by thinking through what our response should be in the light of our spiritual convictions. Then let us move forward with renewed vigor and determination toward our goal.

—The Editors

Vedanta and Modern Science: An Open Forum

Foreword

Swami Vivekananda was an enthusiast for modern science. He approved its nondogmatic stance, its experimental process, its openmindedness, its insistence on doubt and on proof. He was excited about the way it could grow and discover new truths, ever deeper insights into the mysterious reality of the world. He was fascinated by what it revealed of the power of the human mind to penetrate the patterns of the marvelous Maya that is this universe. And he reveled in the capacity of its discoveries to be put to use in easing the life of the ordinary person through its accompanying technology and in lifting the minds of ordinary persons through vistas of larger contexts and deeper unifying systems.

In this issue of AV we explore several of the many ways of relating our experience of Vedanta to our experience of contemporary science. Are these two separate realms, with different ways of setting about their work and different goals? or do they mesh in certain ways and reinforce one another? or are they best seen as complementary, developing different but equally valid dimensions of the one reality? What values do they share? what methods or procedures? How are they taught? Does the Vedanta of Swami Vivekananda stand in some special relation to the scientific mentality? Has this colored the American experience of Vedanta? Do we favor this, and if so, can we further develop it? These are only a few of the interesting questions that can be raised in this discussion, and the articles published here are only scratching the surface of the conversation we could have, We hope they will provoke further essays and also correspondence that we can share with our readers.

—Beatrice Bruteau

Science—A Spiritual Endeavor

Joan Elisabeth Shack

During a lecture in London in October of 1896, Swami Vivekananda traced the evolution of man's conception of God and his spiritual progress. In this context, he remarked, “In the light of Vedanta, you will understand that all sciences are but manifestations of religion. . .”[1] How does the “light of Vedanta” elucidate Swamiji's comment?

1. *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition (Calcutta: Advaita Ashrama, 197l-1976), II: 116. (Hereafter *C.W.*)

Generally speaking, Vedanta divides knowledge into two classes, Apara (secular) and Para (spiritual). Differences exist between these two classes of knowledge—differences in their domains of interest as well as their methods. Swamiji reminds us, however, that according to Advaita (non-dualistic) Vedanta, ". . . in reality all this difference is only one of degree and not of kind. . . secular and spiritual knowledge. . . are the same thing—the same infinite knowledge which is everywhere fully present from the lowest atom to the highest Brahman - they are the same knowledge but in its different stages of gradual development."[2] Spiritual knowledge and secular knowledge are "different stages." Science is a manifestation of that one "infinite knowledge."

Religion Manifesting Itself

In addition, Vedanta maintains that religious quests and yearnings are rooted deep in the human constitution. They represent our struggle to reclaim our true identity, our real nature (*swarupa*), that nature being Satchidananda (existence/knowledge/bliss). In all contexts of life, our longing to perpetuate ourselves (existence), to know more and more (knowledge) and to be happy (bliss) is then our real nature manifesting, seeking expression. Just as a fish out of water struggles to get back to water, its home, we struggle to express our essential self, in order, like the fish, to return "home." This Vedantic teaching leads us to conclude that religion manifests itself in "everything that exists in this world."[3] Science, being a human endeavor, must also represent this struggle—must be religion manifesting itself.

Naturally, we look for specifics—parallels between science and religion that lend credence to Swamiji's position. This article touches upon three features of science that are essentially of a spiritual nature. They are, so to speak, pieces of evidence; they show the particular ways in which religion "appears in" science. The first is that, throughout history, the creative impulse, the source of a scientist's understanding, has bordered on the mystical. Secondly, within the past century, the increasing subtleness (abstraction) of science is lending it a more spiritual aura. Thirdly, the age-old goal of science, its search for unity, defines it as inherently a spiritual quest.

A closer look at each similarity will result in a sharper composite picture of science as, essentially, a spiritual endeavor. Also, taken together, they suggest that science is evolving spiritually. Its true nature is becoming more apparent over time. Western science is very young, a relatively recent enterprise. A hundred years from now the manifestation of its "spirituality"

2. Ibid., IV: 434.

3. Ibid., II: 116.

will, we can reason, be greater, just as it is more so now than a hundred years ago. This assumption parallels Swamiji's view of our evo1ution as ". . .the soul trying to manifest more and more of its infinite energy. . ."[4]

Scientific Perception Versus Mystical Inspiration

Legend has it that Archimedes ran through the streets of Syracuse without clothes, repeatedly shouting in Greek, "Heureka, heureka!" meaning he had found what he sought. As he was bathing, he suddenly perceived that the volume of water displaced by an object is independent of the shape of the object. This fact, he intuited, could be used to determine whether the king's crown was made of pure gold. In that instant, he solved the riddle.

It is said that Newton, while seeing an apple fall, suddenly grasped the idea of universal gravitation, a perception blocked before that moment in time.

Swamiji met Nikola Tesla in New York City in 1893. Tesla was unquestionably one of the world's greatest geniuses. One day, walking along admiring the sunset, he snapped into a rigid pose, as if in a trance. His friend, accompanying him, spoke to him but received no answer. In that instant of time, he had solved the alternating current problem that he had been pondering.

In our own time, David Bohm, professor of theoretical physics, is known for his sweeping new implicate order theory of the universe. He narrates that, as a boy, atop a hill overlooking his hometown, he was overpowered by seeing the lights from the town. The energy from these lights went out from the town, extending beyond the earth, until it filled the universe itself. From this insight, his formulation of the nature of reality gradually emerged.

Instances like this abound in the historical annals of science. Truth comes like a flash to scientists—"like sudden floods of light in their mental atmosphere,"[5] in Swamiji's words. In this instant, the veil of nature momentarily parts for them, bringing immediate clarity and certainty. Truth originates from beyond themselves.

This creative impulse, the process of discovery for the scientist, borders on the divine inspiration experienced by the mystics of all religions. Genera1ly speaking, in a religious context, inspiration is viewed as a higher form of knowledge and guidance than reason. However, it never contradicts reason but instead fulfills it. It occurs in those moments when the mystic is unconscious of the external world, in a superconscious state. Swamiji asserts, "It

4. Ibid., II: 339.

5. Ibid., IV: 436.

[inspiration] is the source of all religions, and will ever be the source of all higher knowledge."[6]

Common Denominator

In her book, *Dialogue With Scientists and Sages*, author Renée Weber calls these sudden direct perceptions of mystics and scientists their "common denominator."[7] Abraham Maslow in *Religion, Values and Peak-Experiences*, describes them as the "meeting ground."[8]

Swamiji points out a common feature of the "illumination" of scientists and mystics. In the sphere of material knowledge, as in the sphere of spiritual knowledge, the root of illumination is, he noted, "Hard Tapasya, or practice of austerities in the shape of devout contemplation and constant study of a subject."[9] As a continuation of this thought, but in another context, he clarifies, "They (scientists) study the subject and forget everything, their own identity and everything, and then the great fact comes like a flash."[10]

By reading the life sketches of eminent scientists, the truth of Swamiji's observation is easily ascertained. Caught up in the burning desire to unravel a mystery of nature, they labor feverishly. In their passionate pursuit of the truth, they are one-pointed. They function above the normal level of' physical limitations, deprived of sleep, leisure time and social contacts. Their intensity of thought makes sleep impossible. They prefer isolation to avoid distractions.

Intense struggle and constant practice are also needed to attain purity of heart, a prerequisite for spiritual illumination. Struggle is at the "root of illumination" in both spheres.

Abstraction in Science

Over the centuries, physicists have directed their attention from the gross to the subtle to the subtler. They have been attributing qualities to matter that are beyond what would be generally considered material (tangible). These

6. Ibid., IV: 213.

7. Renée Weber, *Dialogues With Scientists and Sages* (Viking Penguin, 1986), 149. (Hereafter *Dialogues*)

8. Abraham H. Maslow, *Re1igions, Values, and Peak-Experiences* (Viking Penguin, 1970), p. 28.

9. *C.W.*, IV: 436.

10. Ibid., IV: 230.

concepts cannot be pictured in a physical sense. They are not verifiable by any of our five senses.

Several times, referring to nineteenth century science, Swamiji commented on the abstraction of scientific concepts. In a discourse on religion, he stated, ". . .Take any one of the most material sciences, . . .study it, push the study forward and forward, and the gross forms will begin to melt and become finer and finer, until they come to a point where you are bound to make a tremendous leap from these material things into the immaterial. The gross melts in the finer. . ."[11] According to Swamiji, this process is inevitable. Furthermore, in his talk entitled "Fundamentals of Religions," he highlighted the role of abstraction in science. Metaphysical concepts like space and time, he pointed out, define the very process of gathering facts. They become the background upon which facts are arranged and grouped, and therefore understood.

In the quantum world (the world of the incredibly small), abstraction proliferated dramatically in the past century. Physicists now refer to the basic unit of matter as quarks, constituents of the protons and neutrons of any atom. In the 1960's, quarks were not easily detected or defined. Presently, their attributes—electric charge, flavor and color—are known. As the twentieth century concluded, scientific study shifted to gluons, the particles that bind quarks. Evidence substantiating the existence of gluons is still being collected. Almost everything known by QCD (quantum chromodynamics) theorists, who study gluons, arises from massive computer simulations and not from direct calculation. In fact, there are many other quantum particles named but not yet detected. The particle must live for .00000000000000000000001 seconds to be detected. Thus, quantum particles are becoming less and less tangible, more and more abstract and subtle.

Mental Constructs

In addition, string theory held sway in physics throughout the last decade. All elementary particles being studied were regarded as one-dimensional objects, strings, with differing modes of vibration. In the past two years, 11-dimensional M-theory has generated great excitement. Replacing string theory in large part, under this theory an electron is viewed as a membrane closed in on itself, like a bubble. Both these concepts are only mental constructs. And as theories continue to be refined, to answer the questions the older theory couldn't, space-time becomes an increasingly abstract concept.

Mathematics has become the dominant scientific language. It is a way of thinking which gives meaning to an intangible reality. In fact, the only thing

11. Ibid., III: 2.

known with certainty about subatomic particles is the mathematics. The Schrödinger wave equation, which determines the probable behavior of subatomic particles to a high degree of accuracy, illustrates this fact. With this equation, scientists can mathematically predict the properties of a wide variety of substances before creating them in the laboratory. Mathematics is thus the source of our knowledge. The external world is now a world of symbols, of math equations. There is no stronger indication of how abstracted science has become.

In dialoguing on the relationship between science and mysticism, physicist David Bohm writes, "If you emphasize mathematics as much as scientists now do, without any physical picture of matter, you are tacitly saying that the essence of the world is something abstract and almost spiritual, if you really think about it."[12] Bohm deems mathematics to be a more spiritual than material reality. The increasing abstraction in science is a more recent manifestation of its spirituality.

Search for Unity

> Vedantists declare that unity is the only thing that exists; variety is but phenomenal, ephemeral and apparent.[13]
>
> . . . the Vedantic mind found this unity is the result of all its analyses and wanted to base everything upon this one idea of unity.[14]
>
> . . . the destruction of variation and establishment of sameness in the external world. . . is impossible. . . recognise the unity in spite of all these variations. . .[15]

Statements of this nature are scattered throughout Swamiji's addresses. They cite the preeminence of the unity theme in Vedanta. This theme is common to all mystical traditions, since mysticism is, by definition, the experience of the oneness of reality.

Unity is essentially the quest of science too. Historically, advancements in science have had a unifying effect. Specifically, they have integrated seemingly disparate phenomena. Newton's theory of gravity integrated the motion of all bodies, interstellar as well as masses on earth. Maxwell unified

12. *Dialogues*, p. 143.

13. *C.W.*, I: 432.

14. Ibid., I: 436.

15. F. David Peat, *The Philosopher's Stone: Chaos, Synchronicity and the Hidden Order of the World* (Bantam Books, Inc., 1991), p. 39.

electricity and magnetism. Einstein integrated time and space into a space-time continuum and matter and energy into a matter-energy continuum. Quantum mechanics connected the observer and the observed. Chaos theory dissolved the sharply delineated boundaries between the hard and soft sciences, humanity and nature, the microcosm and macrocosm.

Grand Unified Theory

Secondly, the effort of science to understand reality in terms of unity is evidenced in the physicists' search for the grand unified theory. It would unite all known forces and describe all physical phenomena. As stated earlier, M-theory is the newest arrival on the scene. Scientists also retain belief in a concept such as supersymmetry because it provides a framework within which the known forces are united, even though such symmetry may not exist at all.

Many writers and scientists have picked up on this theme of unity shared by science and religion. In her book mentioned earlier, Renée Weber summarized its thesis as: "A parallel principle drives both science and mysticism—the assumption that unity lies at the heart of our world and that it can be discovered and experienced by man."[16]

David Bohm, who views his work as a bridge between scientific and spiritual, declares, "The mystics see in matter an immanent principle of unity, and this is implicitly what the scientist is also doing."[17]

Swamiji was actually the first to recognize this similarity. In his talk, "Unity, the Goal of Religion," he concluded that Vedanta's search for final unity is "the goal of science and religion,"[18] alike.

Conc1usion

Over the 1ast decade, the dialogue between science and mysticism has gained new momentum in American culture. Many scientists and phi1osophers, with their eyes focused on the frontiers of modern science, foresee their "integration." In the words of Nobel Laureate Ilya Prigogine, "Today we are going through a reconceptualization of physics which brings the picture of the inner and outer world closer together."[19]

16. *Dialogues*, p. 13.

17. Ibid., p. 144.

18. *C.W.*, III: 5.

19. *Dialogues*, p. 185.

From the Advaitic perspective, however, there is nothing to "bring together," for Advaita Vedanta views secular knowledge as not different from spiritual knowledge. There is, therefore, nothing to "bridge." Consequent1y, by citing parallels between these two branches of human knowledge, this article is not suggesting an integration of the two, along the lines pursued by modern writers. Instead, these similarities intimate that the domain of science is already rooted in the spiritual. They are presented as telltale signs that the signature of the Divine, its imprint, can be found in science. "In everything that exists in this world,"[20] religion shows through. ❑

The "Religion" of Science

M. Ram Murty

[Based on a talk given at the Ramakrishna Vedanta Society of Massachusetts in the fall of 2000]

It is rather curious 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 back." 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."

20. *C.W.*, II: 116.

Recall that the word "Vedanta" is derived from the Sanskrit word *vid* which also means "to know." 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," and "science" can be traced back to the word meaning "to cut," this would seem to imply that "religion" and "science" are opposites. However, closer reflection shows a deeper meaning. Both science and religion seek to understand by "cutting," that is, by analyzing, by seeking the original principles, and by "joining," that is, bringing together separated items and insights to be seen as a whole.

Comparing Francis Bacon and Swami Vivekananda

But now that we have undertood the root meanings of the words "religion" and "science," how can it be that science can be thought of as religion? A basic prerequisite for the study of science is what has often been called the scientific mood. It is well described by Francis Bacon, who said at the opening of the era of modern science:

> 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.[1]

These words resonate with the qualifications of the jnani, the seeker of knowledge in the Vedantic tradition. Let us take Vedanta as "religion" for purposes of this discussion and see how its intentions and practices correspond to Bacon's statement.

In his class-lecture, "Steps to Realization," Swami Vivekananda outlined the prerequisites for the seeker of truth. "First. . . come *shama* and *dama*, which. . . mean keeping the organs [of perception and imagination] in their own centers without allowing them to stray out. . . To restrain the mind from wandering outward or inward. . . is what is meant."[2] This corresponds to

1. Quoted in J. Arthur Thomson, *Introduction to Science* (London: Oxford University Press, 1950), p. 1 of chapter "The Scientific Mood."

2. *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition (Calcutta: Advaita Ashrama, 197l-1976), I: 405-406.

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 Vedantin must give up this habit."[3] 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*, forbearance. This is not explicitly on Bacon's list, but his "patience to doubt, . . . slowness to assert, readiness to reconsider" can be regarded as akin to forbearance, which the dictionary defines as "refraining from enforcement."

The Role of Faith in Science

The next qualification on Vivekananda's list is *sraddha*, 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."[4]

Scientists must have a two-fold faith. First, they must believe that the universe is orderly, that there are patterns, laws and principles hidden behind the manifold phenomena. Second, they must believe that they can find these principles, and, further, that they may find *new* principles which will necessitate the revision or abandonment of previously held views. If we let traditional thinking overwhelm us, we may never be able to make a discovery. Without faith, we can never discover new ideas. Thus, we all must have faith to "catch the resemblance of things," faith that we have a "relationship with truth."

In Vivekananda's vision, this aspect of faith goes still 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 the 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

3. Ibid., I: 406.

4. Ibid., II: 301

> one. . . You know but little of that which is within you. For behind you is the ocean of infinite power and blessedness.[5]

After faith comes *samadhana*, or constant practice, steadiness of mind, to keep it fixed on an idea. This is a prerequisite for all creative endeavor. When Isaac Newton was asked how he made his discoveries, he said, "by learning to keep my mind fixed on an idea." This is Bacon's being "steady enough to fix and distinguish the subtler differences."

Mind and Meditation

Mumukshutva, or the desire to be free, is next on Vivekananda's list. It corresponds to Bacon's "desire to seek." But we must know how to seek. Since all science, all knowing, takes place in the mind, we must learn how the mind itself works.

Vivekananda explains:

> 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.[6]

Here we recognize Bacon's "fondness to meditate." Concentration must be refined into the art of reflection. We must reflect upon what we do. We must examine the consequences. 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. Francis Bacon also said, "Knowledge is power." When we know, we become capable of acting, and we become responsible for our actions. 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.

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.

5. Ibid., II: 301-302.

6. Ibid., I: 131.

In my view, the greatest discovery of science is the scientific attitude. It is contained in the passage of Francis Bacon quoted earlier. And, as shown above, Bacon's scientific attitude matches point by point the spiritual attitude of the jnana yogi, as amplified by Vivekananda. Thus, if jnana yoga is an aspect of religion, then any exercise of the scientific attitude can be said to be a practice of religion. ❑

Western Religion, Science, Vedanta

Bernard Lassegue

The conflict between religion and science has a long history in the Western World. A brief visit to the web will easily convince you that a fierce debate is still raging today. I suspect that many like me, raised in Christianity and who studied science, have suffered from this antagonism and wavered between the two sides. Churchgoers may have felt a growing sense of schizophrenia, feeling torn apart between cherished beliefs and irreconcilable modern ideas.

Today many of the traditional concepts of the church are viewed with increasing skepticism. This is true of major articles of faith such as the existence of God or the individual soul, as well as a large body of less crucial notions such as the reality of miracles which often appear to the modern mind as poetic exaggerations from ancient peoples. The virtues promulgated by the church are still largely appreciated, but no longer seen as different from those of lay humanitarian organizations.

Some supporters of spirituality say that the tension between religion and science is coming to an end. They claim the evidence is so overwhelming that scientists will soon include religious concepts in their theories. Are there any reasons to support such optimism? Could ideas or practices from the East help foster such a détente?

Historical Examples of the Conflict

In the Middle Ages the Church was a major force in European society. Cathedrals were built; monastic orders were established by great mystics. With the Renaissance came the renewal of science, which had not changed much since antiquity, and the simultaneous decline of the church. Is religion thus really invalidated by science and faced with inexorable disappearance? A few examples may help clarify the issue.

One famous point of contention between traditional religion and science was the model, taken for granted today, of planets revolving around the sun,

introduced in 1530 by Copernicus. The idea that man's earth is not the center of the universe was so disturbing that Galileo was forced to renounce it in court (1632). The situation is even worse today, since our world appears to be no more than an infinitesimal speck of dust in a cosmos vast beyond comprehension.

At home too, man was robbed of his special position by Darwin's theory of evolution which showed that our species was not created in isolation. In spite of a large body of corroborative evidence from comparative anatomy, geology, archeology and molecular biology, conservative religious groups still vehemently deny the validity of evolution.

The psychology of Freud, consistent with evolution, suggests that all our accomplishments, the pride of our species, arise from animal sexual energy. Even worse, modern biological sciences describe animals and humans as intricate machines whose functions can be controlled by drugs. Electrochemical modifications in the brain would be sufficient to explain perception and behavior and leave little reality to personal choice, judgment or emotion.

Science Does Not Hurt, but Rather Improves Religion

The examples just described have been used by materialists to claim that science disproves religion. However, the bulk of scientific work has not even addressed issues which constitute the basis of traditional religions, such as the existence of God or the reality of mystical experience. Because science has mostly studied the physical universe, it should not be surprising that it has little to say on such questions which are usually left to metaphysics. Thus it would be a logical mistake to conclude that what science has not described cannot exist. Other common illogical interpretations of science are that our small physical size makes us unimportant and that we are nothing but animals or electrochemical machines.

If science does not disprove religion, there are probably other reasons for the rise of materialism and religious decline in Europe. On the one hand, prevalence of technology, brought about by the industrial revolution, accompanied by dehumanizing factory work, probably contributed more to materialist thought than science itself. On the other hand, the church was discredited by its own political mistakes, such as the selling of indulgences, the crusades, persecutions and tolerance of the Holocaust, rather than by errors in doctrine.

It is true that science challenges many traditional concepts regarding the nature of man and the universe which are propagated by religion alongside its core message. Confusion by religious people between the accessory cultural message and the mystical teachings is the source of many conflicts and difficulties in adaptation to a changing world. In this way, science should be

seen not as an opponent of religion but as an ally, since it can help religion remember which of its doctrines are essential. For example, the presence of a blind spot in the retina suggests that the eye was not designed by a cosmic architect with a magnified human mind seeking maximal efficiency. It does not however preclude the existence of a pervasive organizing force in the universe whose ways are more subtle than ordinarily suspected.

A difference in mindset is often blamed for the division between science and religion. Thus, science is supposed to promote objectivity, skepticism and rejection of authority while many religions emphasize faith in tradition, scripture, and dogma. In fact the dogmatic are probably present in equal numbers in both camps, due to a lack of complete understanding of their own, as well as the opposite, field. For example, a common mistake is to think that truths are mutually exclusive. Thus, the conservative religious cannot see that evolution and creation can both be true. Similarly, some scientists may hastily conclude that nothing can exist beyond the materials they are investigating.

Can Vedanta Help the Reconciliation between Religion and Science?

The conflict between religion and science has divided our society but appears to be a lesser concern to the Eastern mind. Thus, whether or not these opposites may ultimately be reconciled in the West, let's consider some instances in which Eastern thought might help.

To the materialist who demands objective evidence before accepting any idea, Vedanta might suggest that transcendent reality can be experienced in daily life. By recognizing the validity of subjective perception, the materialist's world would shift from meaningless to rewarding. Similarly, self-confidence and tolerance of others would be improved in the religious conservative by the Vedantic notion that divinity pervades all beings, thus leading to greater adaptability in a scientific world.

In the last 50 years, major setbacks in the development of artificial intelligence have led cognitive sciences to recognize that consciousness is a "hard problem." This deadlock might be alleviated if Vedanta finds a way to share its idea that consciousness precedes mind and organized matter.

One of the major concepts of Vedanta that would improve tolerance between Western science and religion is that God cannot be discovered as an object, but as the subject. By taking this idea into consideration, science would stop claiming that God does not exist because it is not found in the material universe, and religion would not object to a description of the world formulated by science since it would not impact its belief. ❑

Science and Vedanta: Not Just Method

William A. Conrad

According to Richard Feynman, Nobel laureate in physics for his theory of quantum electrodynamics and also a superb teacher of science to professionals and beginning students, science is "the belief in the ignorance of the experts."[1] This view is one that can stimulate a neophyte to make new discoveries. Feynman's whole emphasis is on clearing out the mental underbrush which impedes original thought. Doubt is the correct learning attitude because all knowledge is, as Bertrand Russell says, "uncertain, partial and inexact," a statement with which Feynman is in complete agreement.

Is There a "Scientific Method"?

There is much talk among spiritually-minded people of a "scientific method," but does such a thing really exist? Any scientific project begins with a subject that is ripe for systematic explanation, but there is no method of choosing that can be guaranteed to work. One must recognize a ripe and promising field ready for the reaping; but there should be no illusion that success will come without a large measure of luck. Of course, if you are interested in routine extension of a field, a problem is easily chosen. There are many well defined problems at the boundaries of every scientific field which need to be tied down, but that is not the way to bold new developments.

As Feynman has remarked, ignorance of the literature on the subject is often an aid to discovery provided one has a general knowledge of that subject. From personal experience I can say that the ability to draw a parallel between two entirely different fields exhibiting similar phenomena or similar phenomenal patterns can lead to an interesting discovery. I found that having worked with negative resistance solid state devices prepared me to recognize a negative resistance in fluid dynamic systems, although other researchers with similar experience had not drawn the parallel.

But the people in the new field have to be able to appreciate the discovery on its own terms. It is difficult to stretch present assumptions to accommodate new knowledge.

There is a similar difficulty about "method" in the case of so-called scientific spirituality. In the search for spiritual experience one is supposed to follow fixed methods to get results. But, as Feynman points out with regard to science, it is dangerous to teach students only how to get a certain result rather than leaving them free to experiment on their own. Strictly speaking, spiritual

1. Richard P. Feynman, ed. by Jeffrey Robbins, *The Pleasure of Finding Things Out* (Cambridge, Mass.: Perseus Books, 1999) p. 187.

teachers do not simply teach "method." The good ones inspire students to investigate the subject and give them an interim conceptual structure to work with. Since spiritual experience is beyond mind and speech, it cannot be taught or even spoken of. Wittgenstein's chapter 7 of his *Tractatus Logico-Philosophicus* applies here. The chapter reads in its entirety: "Whereof we cannot speak, thereon we must remain silent."

Why Do Spiritual Teachers Speak?

How is it, then, that spiritual teachers speak of the experience? What they are trying to do is to give the aspirants something they can work with to get the desired experience. Each aspirant must grasp the description in his or her own way since it is impossible to describe to another even how to move the body, to say nothing of the mind. From an objective standpoint, attempting such a description amounts to suggesting to the student the nature of the experience to be had. And such prior discussion can taint the evidence for validity and detract from the possibility of using similar experiences as corroboration of the truth of what is being experienced. Of course, there are reports from people separated in time and space who did not communicate beforehand, and these may be claimed as evidence for the objectivity of what is reported. Nevertheless, great spiritual teachers all say rather uniformly that what they experienced cannot be described.

There is a lovely passage in *The Gospel of Sri Ramakrishna* where Sri Ramakrishna is trying to share with his disciples what happens as his mind goes higher and higher. He finally gets to a state where he says, "The Mother holds my tongue." He wanted to do the impossible out of his love for the disciples, but even he could not describe the highest state.

The Importance of Character

Because of this impossibility of comparing subjective experiences the need arises to emphasize how one's character is transformed by the experience. The change in character does not attest to the truth of the experience, but it does point to the value of having such an experience. One who claims to have had spiritual experiences and whose character is unchanged is at best self-deluded, at worst a charlatan.

Science and spiritual life are similar in the sense that there is no method to pick a fruitful problem, and there is no way to describe the highest spiritual experience. For science, the beginning is unfathomable; for spirit, the end is unfathomable. Both are valuable in their own ways, but one does not intrude on the other.

But perhaps there is a method in between the beginning and the end. How does a scientist proceed once a problem has been selected? There is a myth that all a scientist has to do is systematically collect data and then the truth will

become clear. This is very far from being the case. The great breakthrough stories show the sudden, spontaneous appearance of the solution. Before Kekule had a vision of the benzene ring—carbon atoms linked in a circle—everyone else had thought the atoms were strung out in a straight line. Feynman's account of the development of his theory of beta decay, or the transformation of neutrons into protons and protons into neutrons, shows how messy discovery really is. There were crude data in the literature, experimental errors which had to be corrected, wrong theories and general confusion. Finally, Feynman and Gell-Mann, stimulated by the Lee / Yang theory of the non-conservation of parity, came up with an almost correct theory that fitted most of the data. Abdus Salam afterward developed a theory that fitted with the data more exactly, and C.-S. Wu confirmed his theory by experiment.

Art, Science and Spirituality

At one point in his life Feynman became interested in learning to draw and paint in order to try to express feelings he had about physics which he could not put into words. After some time, he even had a one-man show at Caltech, although it was in part because he was a professor at Caltech as well as an artist. After going to some art classes and observing the difference between the way the art teacher taught and the way physics is usually taught, he said:

> I noticed that the teacher didn't tell people much. . . Instead, he tried to inspire us to experiment with new approaches. I thought of how we teach physics. We have so many techniques—so many mathematical methods—that we never stop telling the students how to do things. On the other hand, the drawing teacher is afraid to tell you anything. If your lines are very heavy, the teacher can't say, "Your lines are too heavy," because *some* artist has figured out a way of making great pictures using heavy lines. The teacher doesn't want to push in some particular direction. So the drawing teacher has this problem of communicating how to draw by osmosis and not by instruction, while the physics teacher has the problem of always teaching techniques, rather than the spirit, of how to go about solving physical problems.[2]

Swami Brahmananda made similar remarks about spiritual life. He said, "Through religous practices the mind will become pure, and you will understand many truths. There is no limit to them. Lose yourself in God. Try to meditate within the shrine of your own heart. *What that shrine is will*

2. Richard P. Feynman, as told to Ralph Leighton, *Surely You're Joking, Mr. Feynman* (New York: W.W. Norton & Co. Inc., 1985), p. 264.

be revealed to you as you practice" (italics added).[3] That is, one cannot put into words what the shrine of the heart is.

Maharaj also said, "No scriptures or books can create such pure impressions or transform a man's life as much as contact with an enlightened soul."[4] Maharaj's disciple, Swami Pavitrananda, used to say frequently, "Spiritual life cannot be taught; it must be caught." In science, in art, in religion, at the heart of all human striving, there is something which cannot be spoken of. It is that which is drawing us to a goal greater than what we can consciously express. May we all be able to reach that goal. ❑

Applying Science to Religion

> In one word, what is meant by science is that the explanations 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 anyone of these to explain the things he knows, nor does any other scientist. And this is one of the features of science which I mean to apply to religion. In this religions are found wanting and that is why they are crumbling into pieces. Every science wants its explanations from inside, from the very nature of things; and the religions are not able to supply this. There is an ancient theory of a personal deity entirely separate from the universe, which has been held from the very earliest time. The arguments in favour of this have been repeated again and again, 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 was wrong; it was an explanation from outside, and not inside. What is the cause of the universe? Something outside of it, some being who is moving this universe! And just as it was found insufficient to explain the phenomenon of the falling stone, so this was found insufficient to explain religion. And religions are falling to pieces, because they cannot give a better explanation than that.
>
> —Swami Vivekananda, *Complete Works,* I:371

3. Swami Prabhavananda, *The Eternal Companion: Brahmananda, His Life and Teachings* (Hollywood: Vedanta Press, 1947), p. 136.

4. Ibid., p. 196.

Is Vedanta Scientific?

William Page

I have long been bothered by the claim that Vedanta is scientific. This claim has been made with increasing frequency and insistence in recent years, and has become a virtual article of faith within the Ramakrishna movement.

My unease with this claim has two causes. First, if Vedanta is true, it does not need to cling to the coattails of science. Science enjoys great prestige because of the discoveries it has made about the phenomenal universe, but even more so because of the technological advances which those discoveries have facilitated.

When Vedanta claims to be scientific, it demeans itself by attempting to climb aboard the science bandwagon and co-opt some of science's prestige. It puts itself in the position of the jackal in one of Sri Ramakrishna's more amusing but lesser-known parables.

In this parable, a hungry jackal sees the magnificent testicles on a bull, and follows the bull around in the hope that the testicles will drop off so that the jackal can eat them. Sri Ramakrishna told the parable to illustrate the folly of people who cozy up to the rich in the hope of getting money from them: but it applies equally to religions which claim to be scientific in the hope that some of science's prestige will rub off on them.

Why Should Vedanta Kowtow to Science?

If Vedanta is true, it doesn't matter if it is "scientific" or not. If it is false, it can claim to be "scientific" till doomsday, and trot out all sorts of arguments and proof—but none of that will make it true. By making such a claim, it degrades itself. Why should Vedanta kowtow to science? Let it stand on its own two feet.

That's my first objection. My second objection is semantic. When we claim that Vedanta is scientific, we are being careless in our use of language.

Most dictionaries define science something like this (from the Collins Concise Dictionary Plus): "1. the systematic study of the nature and behaviour of the material and physical universe, based on observation, experiment, and measurement. 2. the knowledge so obtained or the practice of obtaining it. 3. any particular branch of this knowledge: *the applied sciences*. 4. any body of knowledge organized in a systematic manner. 5 skill or technique. 6. *Archaic,* knowledge."

In fact, definitions 4-6 are so general as to be practically meaningless. If we accept definition 4, any systematic body of knowledge could claim to be a science. History, alchemy, acupuncture, theology, astrology, palmistry—all

could claim to be sciences. So could Vedanta—or any religion, for that matter. The only definitions that have any real meaning are the first three.

Nowadays, when we talk about science, we do not mean knowledge in its broadest sense, nor even in a systematic sense. We mean the natural sciences which have produced the discoveries and technological advances mentioned above. These sciences—physics, astronomy, chemistry, and the various biological sciences—deal with physica1, material phenomena which are subject to observation, measurement, and experimentation. In short, they deal with phenomena that can be investigated empirically. "[Science] excludes all forms of knowledge which are intuitive in character and which cannot be explained by general laws." (N.V.C. Swamy, "Values in Science and Technology," in *Values: The Key to a Meaningful Life*, Sri Ramakrishna Math, Chennai, 1996, p. 183.) Non-physical, non-material phenomena, which cannot be empirically investigated, are entirely outside its purview.

Different Subject Matter, Different Methods

Vedanta, by contrast, deals with Brahman, a non-physical, non-material noumenon which has no empirical referent, hence is not accessible to physical observation, measurement, or experimentation. Vedanta claims to gain knowledge of Brahman by means that can be described at best as subjective and intuitive, rather than objective and empirical. Science and Vedanta deal with two entirely different types of subject matter, and they use entirely different methods.

Vedanta therefore cannot claim to be scientific, because it does not deal with physical phenomena, it does not use empirical methods, and its primary assumption—the existence of Brahman—cannot be empirically verified. No one has yet been able to demonstrate in any empirically verifiable way that Brahman exists. We have scriptural assertions, we have the testimony of sages, we have extremely subtle and sophisticated arguments—but we have no empirically verifiable evidence. The very notion of Brahman precludes the possibility of such evidence; for Brahman is always said to be ineffable, indefinable, beyond the senses, neither this nor that.

Does this mean that Brahman does not exist? No: it simply means that its existence is not empirically verifiable. Can Brahman exist without being empirically verifiable? Of course it can: but because we have no way of verifying its existence empirically, its existence is a matter of faith rather than a matter of demonstrable fact. This is why Vedanta is not classified as a science.

For the above reasons, therefore, to claim that Vedanta is scientific is to misrepresent either Vedanta, or science, or both. I suggest that we stop making such claims, and turn to more productive endeavors. ❑

Swami Vivekananda's Teaching in the West: Yoga as a Science

Sister Gayatriprana

[A lecture given at the Vivekananda Centre, London, March 31, 2001]

I. Introduction: The Purview of Yoga as a Science

The subject of yoga is of major importance in Swami Vivekananda's teaching, in terms of its presence throughout his whole work, in terms of the originality of his presentation of the subject, and, finally, in terms of the amount of time and energy he devoted to it. Its tremendous and special importance to the West hinges on the fact that, despite the development in the West over the past 400 years or so of a rather fine perennial and mystical philosophy, we have failed to develop methods to make it living, dynamic and powerful enough to be the backbone of our culture. How to do that, I believe, is the question of the hour; and to my mind, much of the burgeoning New Age movement is motivated by the search for ways and means to actually experience what Spirit or higher states of consciousness really are. No doubt the search of the New Agers is muddled and confused and at times downright ludicrous and indecent; but behind it there is a tremendous earnestness that deserves to be treated with respect and a genuine effort to provide workable solutions to the spiritual problems of contemporary society.

Those of us who have benefited from the teachings of Swami Vivekananda have, I think, a responsibility to familiarize ourselves with his teachings on yoga, to assimilate them thoroughly and, above all, to put them into practice with all sincerity. Only in that way can we transform ourselves and at the same time make a genuine contribution to our culture and civilization, so urgently in need of a workable and rational spiritual science.

The Science of Yoga

A spiritual science? Am I equating yoga with science? That was certainly one of Swami Vivekananda's goals with respect to yoga; he wanted to demonstrate that it is a science, though he himself did not lay out systematically his criteria for doing so. I would say that by science he means:

1. It tackles problems that can be defined in terms of empirical human needs.
2. It presents methods, attested by time, workable and universally available so that the results obtained by them are amenable to verification or falsification by others.

3. It calls for the systematic and thoroughgoing application of the chosen method with careful observation and study of the results.

4. It leads to a generalization which can be used to develop the science further.

5. Its generalizations can be used to resolve the problems that generated the inquiry in the first place.

This approach is, of course, one that was developed in the West and demonstrated to be a very, very powerful tool to control and modify the material world. Swami Vivekananda, however, proposed to apply this method to the domain of yoga, which up till that time had been a peculiarly Indian concern. Working its works outside the pale of systematic and analytical science, yoga had become, in Swami Vivekananda's opinion, "bewildering, yogi-ism", based on "a queer, startling psychology." on which he was determined to throw the light of modern scientific methods.[1]

Now, what is meant by yoga? If it is a science, it is primarily a subjective one, one that deals with the workings of the human mind, not through any external instruments, but through the agency of the mind itself. In making this statement, I am using mind in the broadest possible sense to apply to the peculiarly human faculty of self-consciousness which permeates all of our faculties and their activities. Swami Vivekananda saw that selection of the mind as the instrument involves its isolation as an instrument, its concentration, its purification and finally, its sublimation into what we might allegorically call a laser beam that can work in dimensions totally beyond what we are familiar with at present. Finally, he proposed four different branches of this science - the yoga of work, of emotion, of self-reflexion, and of intuition. To these he added the holistic capacity to integrate all of the four domains into a whole and to move from the domain of one to that of another at will and with no constraints of any sort.

Levels of Reality

One may see in this agenda many analogies with natural science as we know it at present. Where yoga differs from the natural sciences, however, is its acceptance of the idea that there are different levels of reality. This is where Vedanta comes in. From the Vedas onwards, the basic idea is that the human mind is constructed to tap into, not simply the material world, but several "depth dimensions" of increasing magnitude, power and integrative capacity. The final level is an inconceivable Ground, whose magnitude is totally beyond our grasp, whose power is infinite and whose integrative

1. Letter to Alasinga. February 17, 1896. *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition (Calcutta: Advaita Ashrama, 1989), V: 104-105.

capacity is instantaneous and inexhaustible. This ground into which it is possible to tap, according to Vedanta, has been the reality behind such names as God, Allah, the Void, Brahman, or generically, Spirit.

The agenda of yoga in the West is to take us from our present world, defined as matter, limited by the laws of cause and effect and full of conflict and paradox, to Spirit in which, by definition, matter becomes but a tiny subset of reality, cause and effect but a ripple on an immeasurable ocean, and conflict and paradox but "puppies' play," as Swami Vivekananda put it.[2]

Now, natural science may be said to work horizontally within the material domain, the only domain that at the moment it accepts as "really" real. Yoga, on the other hand, purports to move vertically, between the world of matter and the world of Spirit. Such an agenda is, at present, qualitatively different in its presuppositions from our natural science. The most important of these presuppositions is that the yoga scientist, using his or her own mind as the instrument of investigation, has to be prepared for radical changes within him or herself. If the mind is going to connect up with and access different levels of reality, it must transform itself according to the levels themselves, for the levels have been found not to be whimsical or arbitrary. The testimony of the Vedas and the Upanishads, as well as of the inner core of all religious traditions and, nowadays, transpersonal psychology, points to a definite pattern and consistency of content of the depth-dimensions. There is indeed a vertical and consistent series of levels that can be accessed by graduated modification and development of the human mind.

Transcending Culture-Specific Language

I believe that this is a core statement of the scope of yoga. What has confused the issue and prevented us from seeing yoga as a science, is that thus far it has been presented in intensely culture-specific language. Each and every religious tradition has come up with a presentation of yoga—the Kabbalah, the Spanish Carmelites, tantra, to name but a few—but the language of each is so tied to religious dogma and specific myths and imagery that it is really very difficult to see if there is a shared core process involved and, if so, what it is. Yoga is, as it were, still in the position of alchemy in the 16th to 17th centuries, occult, myth-laden and inaccessible. However, I venture to suggest that, as alchemy was the precursor of modern chemistry, traditional yoga may well be the precursor of a new science.

Swami Vivekananda felt, very strongly, that yoga had to be presented in a very simple way, "so that a child may grasp it," but without doing violence to

2. *Inspired Talks*, June 19, 1895. *C.W.*, VII: 5

human reason and experience.[3] For him yoga must answer human needs exactly as they are experienced. It must present a methodology that is clearly rational, systematic and pragmatic. He stressed again and again that yoga can be taken seriously only when, by following its methods, practitioners actually get results which, within the purview of yoga, means experiences of deeper levels of reality, what nowadays some people call altered states of consciousness. Again, in order that such results can be validated or refuted, within the research worker him or herself and also between different yogis, a framework of communication must be created that expresses the experience in terms of a universal psychology and a cosmology of human possibility. Finally, he laid out the idea that the four traditional paths of yoga must be looked at as complementary and synergistic, unified in the common ground of human experience. In this view, the work-related, emotional, intellectual and intuitive aspects of a human being are the bases for the four yogas, and, as they are inseparable in human experience, so the yogas are ultimately inseparable. His goal was to lay a framework in which people can be equally and harmoniously developed in "work, emotion, mysticism and philosophy", which would actualize the swami's "ideal of a perfect human being."[4] He felt not only that "it is possible to combine all four yogas in one person" but also that "this is what future humanity is going to do."[5]

II. Yoga in the Overall Context of Swami Vivekananda's Thought

Yoga is a very important part of Swami Vivekananda's teachings, but it is not the only one. I would like to take a minute to put the topic of yoga in the context of Swami Vivekananda's overall teachings, partially from general interest, but also to underscore where I believe it stands in the structure of his work. I arrived at what I am about to say in the course of compiling *Swami Vivekananda on the Vedas and Upanishads*, which, as many of you may know is now appearing on Jay Lakhani's website [http://www.vivekananda.com.uk/veda.htm]. I can say that the fourteen years of compiling this work was like a voyage to unexplored outer space or navigating the Atlantic in a heavy storm on a moonless night. The sheer volume of the material was daunting, but even more difficult was the counterintuitivity or failure of the materials to correspond to the way my mind was working. One huge wave after the other would rise up, carry me forward and then dump me in a black trough, struggling, as it were, to breathe. It seemed at times that preparing a compilation was going to be impossible. I finally decided to be rather prosaic

3. Ibid., p. 105.

4. "The Ideal of a Universal Religion." *C.W.*, II. 388.

5. "My Master." *C.W.*, IV: 178.

and simply to follow the method of approaching each Upanishadic passage from the standpoint of:

1. Swami Vivekananda's assessment of previous commentaries by the recognized teachers of Vedanta.
2. His proposal for a new angle of vision on what had been achieved by his predecessors.
3. His presentation of the methods by which to develop the ability to assess the cogency and truth of this new angle on Vedanta. This section is, in fact, his laying out of the yogas and how to understand and apply them.
4. The conclusions we can arrive at by working through the yogas.
5. Swami Vivekananda's vision of how the discoveries made by the science of yoga can be applied in our personal, social, intellectual and spiritual lives.

In short, I took a rational, "scientific" approach. In rigorously following this method throughout the compilation, I was rewarded by the discovery that there are five major themes in Swami Vivekananda's work which I would characterize as follows:

TABLE 1

HUMANISM
YOGA
MAYA
HOLOVOLUTION
HOLISM

Swami Vivekananda's humanism is very explicit, very insistent, and pervades every nook and cranny of his thought. It is not, however, mere glorification of the psycho-physical human organism, though he gives that a valid and at times even prominent place. Rather, it is an interpretation of humanity as the potential of Spirit or as the manifestation of Spirit: thus equating in one sweeping gesture matter and Spirit, which traditionally have been worlds apart. In this spiritual humanism the intrinsic divinity of each and every human being is the criterion of his or her validity, the focus of all efforts at self-transformation, as well as the innate power that carries us beyond mere body and mind to realms of knowledge and experience of an almost different order from what we know now and from which we can, ultimately, manifest divinity, even in the world we now think of as matter.

In this series of topics, yoga becomes the method for testing the hypothesis of spiritual humanism as well as of applying the results we obtain in our inner laboratory of experience. By our systematic and disciplined exploration of our inner experience we discover hitherto unknown dimensions of ourselves and also how to express and manifest them in our day to day life.

The third topic, maya, deals with the issue of transcending some of the tremendous paradoxes and obstacles we encounter as our "ordinary" minds, engaging in yoga, encounter the inner, "vertical" depths of our humanity. In a nutshell, the clash of bringing human and divine so close to each other by yoga is resolved by a leap beyond both into the common ground of human experience, the Self or Atman. As and when we reach such a level of experience, we are in a position to observe that what created all the paradox and struggle in the first place was the rigidity and obtuseness of our own minds. We also observe, to our delight, that here and now we have direct access to an inner reservoir of energy that enables us to deal with and overcome the obstacles we encounter in our attempts to conjugate the worlds of matter and Spirit.

From maya we move on to 'holovolution,' the synthesis of the processes of involution and evolution. In the context of Swami Vivekananda's work, evolution refers to the movement from matter to Spirit—the process of realization—and involution from Spirit to matter, the process of manifestation. These two processes, like yin and yang, are the driving forces of the cosmos, engaging in unending play of dissolution and creation. They oscillate between the poles of Spirit and matter, divine and human, in a flexible and highly creative, but orderly and profoundly intelligent way.

Finally, in holism we find a state of consciousness which sees, not only all the parts that make up the whole, but also that each and every part contains the whole itself. In this state, there is no hierarchy, no privilege, no theory. Spirit is matter and matter is Spirit. This is obviously a very rare type of consciousness. I would say it has been manifest historically largely in what we call the great seers, prophets or incarnations. What is special about Swami Vivekananda's message is that he holds up this state of consciousness as the goal for any human being whatsoever, to be attained as and when the proper methods are rigorously and steadily followed. That is, of course, a huge subject in and of itself, into which I cannot go here.

A Stepwise Progression

This has been a rather breathless overview of the major aspects of Swami Vivekananda's Vedanta. Each and every theme opens up a whole universe of discussion and experience. What I want to point out is that these five themes are not separate from, or independent of, each other. Rather, they

demonstrate, in the order in which I have presented them, a stepwise progression from the most accessible—humanism—to the most counterintuitive and difficult, holism. Again, the progression can be understood in terms of increasing subtlety of perception as well as of depth and penetration of awareness. In short, the scheme is grounded in what can be experienced within any one who is interested and willing to go through the whole process, taking up and using the methodology of yoga.

[To be continued]

Recalling Swami Brahmananda

Swami Devatmananda

[From a talk given at the Centre Védantique Ramakrichna, Gretz, France, in 1950. Swami Devatmananda, then Head of the Portland center, was a disciple of Holy Mother. Selected and edited by Swami Yogeshananda.]

He spoke little, very little. One found him in different moods according to the day. Almost always he was reposing. When we arrived, we saluted. He wouldn't move nor respond. Still, he would not be sleeping. His eyes would be wide open. He had such an attraction in his whole being! We would remain with him for an hour or an hour and a half without exchanging a single word. But we were students, and the moment to leave quickly arrived. Then we took our leave of him, saluting him while saying, "We are coming back!" He would respond, "Very well, come back." Those are the words Ramakrishna always said. Maharaj also used to say, "Yes, my dear child, come back." (In Bengali this is said in just two words.)

So, during an hour of visiting him, Maharaj would say no more than these two words. That vexed me, and when my friend asked me if I was ready to come to see Maharaj, I would first say, "No, he doesn't say anything!" My friend would say, "Come anyway. Here we go!" and I would follow him. And if Maharaj would then say a word, even one, like "How are you doing?", that would remove a great weight from my heart, and I would be happy.

We Lived in His Atmosphere

We did not pose him any questions. We lived in his atmosphere. Later I observed the following experience happening to me: when I left him, I felt like *elsewhere*; my consciousness felt to be on a very high level. I thought this to be particular to me alone, but then I learned sometime later that many

persons felt the same thing, notably Dr. Kanjilal whom I heard explain the same phenomenon that produced itself in him.

In the presence of Maharaj it was unnecessary to meditate; the elevation of consciousness happened by itself.

Truly, he loved us so much. Sometimes he asked little services from us. One day—we were students in a house directed by another swami—he sent someone to find both of us. He had an old small box that he used to put amounts of money in, and this little box was all rusty. Maharaj had wanted it cleaned up and had asked us specially to come to him for this. We were so happy! We arrived very late in the afternoon. Maharaj said to us, "Clean this box!" Immediately we set to work. Maharaj came and admired it and then kept us for dinner. After the meal he said to us, "Go down and clean it some more." After five hours Maharaj said, "That's good!" He called Bhavani to give us some candy and said, "Now, leave quickly."

I repeat to you again. It wasn't the spiritual question that attracted us, but simply this extraordinary personality who gave us so much love. He won us, he molded us by his love. He was like a powerful magnet that draws towards itself the tiny metal shavings.

My friend Bolai and I attended, as students, different universities. But we would meet, arranging our timetables so that we could, at a certain moment, leave everything and run together to see Maharaj. There was no amusement that could hold or even tempt us. We went to him always the moment we had free time. We would remain seated silently near him, while others, perhaps twenty persons, came and went.

One afternoon we were seated there, the two of us. Bolai posed a question about meditation. You cannot understand the personality of Maharaj unless I describe it to you a little. He was sometimes extremely gay; then, suddenly he became serious, grave during several hours. When he was in this state of spirit, no one could approach him, and some great souls like Swami Turiyananda and other swamis remained quietly with their hands clasped. But myself, I was like a small child; I did not know anything and had no fear of speaking to him during such moments.

Extracting Instruction

To return to my story: "Tell us something," said my friend Bolai. Maharaj replied, "Why don't you go and find Jnan [Brahmachari Jnan, a disciple of Swamiji]?" Bolai took this seriously and said, "Shall I say to Jnan that it was you who sent us to him?" "Yes," replied Maharaj. Bolai felt wounded. He turned to me and asked, "Do you meditate?" I said rather heatedly, "How does one do it? Here it is several months that I have been coming here without hearing a word!" Maharaj then decided to talk. He kept

me alone with him and gave me instructions in meditation. Then he sent me to find Bolai, and he explained the same to him. So now it came, the moment when Maharaj finally spoke to us. He had first attracted us to him and made us his own by his love. The rest came by itself.

(At this point Swami Siddheswarananda, head of the Gretz center, recalled the anecdote when Maharaj had given him the order, one holiday, to rehearse the children at the school to stand up all together and bow very low, saying "Good morning, Sir!" when Ramlal entered the classroom.)

Maharaj loved Ramlal a great deal and often recalled how good he was about taking care of everyone, the disciples of Ramakrishna, when they were young and visited the Master at Dakshineswar.

Swami Turiyananda profoundly loved Maharaj. Three months after Maharaj had left his body he died himself, since he no longer took care of himself. Swami Turiyananda was a great pundit, who knew by heart the works of Sankara.

Floating High, Yet Keeping Contact

Maharaj always seemed to float very high, and still he kept a sense of reality and contact with the world. He was extremely gay and teasing. When he laughed he was magnificent. He laughed with all his strength, like a child. One day Gauri Ma entered while he was teasing someone and laughing with all his heart. When she saw that, Gauri Ma said, "Thakur said: 'Rakhal. . .'" Suddenly everything was suspended; from the moment he heard the name of Thakur, Maharaj instantly became serious. And the atmosphere surrounding him was charged with a powerful spiritual force.

One day a swami who directed a center in India came to see Maharaj. "How are the cows doing?" Maharaj asked him. The swami replied: "One's family poses such questions, and you ask the same? Say something else." But does one need to speak? Those who dwell in the divine atmosphere do not pose questions. Maharaj created an extraordinary atmosphere around him. He had a great power that did not need words to express itself, and it created a calm in those who approached him.

What divine love is, one cannot know. One knows only human love. Any activity, study or service is good, but love transcends them all. God is not an abstraction. He is *tangible*, and Maharaj gave that experience to all who came to him. ❑

Vedanta in Brief: How Would You Say It?

[Vedantists are sometimes asked by non-Vedantists just what it is they believe, what defines their philosophy or religion. Answering the question in a few sentences, even for oneself, can be a challenge. We encourage our readers to send us their thoughts so we can share them with other readers. We begin with the following two submissions.]

Encapsulating Vedanta

William Page

A few years ago, an old friend from my hometown in Massachusetts came to Bangkok on a tour with his wife. He'd never been in Thailand before, and he wanted to know everything, right away, with no shilly-shallying. For some reason, he seemed to think I was a fount of local knowledge. He invited me to a Thai dinner at the Oriental Hotel, the poshest place in town, where the soft drinks cost more than I usually pay for an entire meal. Ordinarily I never go near the Oriental, because my scruffy appearance guarantees that the staff will regard me with all the warm solicitude they would accord the local ragpicker.

As we were sitting in the gilded surroundings, watching a Thai classical dance based on the Ramayana, listening to the tinkling music, sipping our drinks and feasting on exotic Thai viands, I savored the luxurious ambiance and slipped into a pleasant stupor. Then my friend turned to me and casually asked, “So, Bill, what’s this Buddhism all about?”

Between Mouthfuls of *Tom Yam Kung*

What’s this Buddhism all about, indeed. I awoke from my stupor and became slightly annoyed. How would he have responded if I had asked him, “So, Dave, what’s this Christianity all about?” These are not questions that you can easily answer between mouthfuls of *tom yam kung*.

But I was wrong to be annoyed. He had asked the question in all sincerity, with a genuine desire to know. It would have been churlish for me to snarl, “Hey, you wanna know what Buddhism is, go read a book.” Besides, I had to be polite: he was paying for the meal. So I roused my sluggish intellect and remembered a reply I had crafted long before in an uncharacteristic burst of prescient cunning.

Buddhadasa Bhikkhu, a wise old Thai Buddhist monk who died in 1993, had once summarized the Buddha’s teaching in a single line: “Nothing whatsoever is to be clung to.” The Diamond Sutra summarizes it in another single]ine: “One should develop a mind that does not abide in anything.” I

had tried my hand at this. Since Buddhism strives to eliminate craving, I came up with the catchy injunction, “Stop wanting.”

But that was too cryptic for the occasion, so I swallowed another mouthful of *tom yam kung* and answered his question with what I thought was admirable conciseness “Buddhism believes that all suffering is caused by craving, so it strives to eliminate craving.”

His eyes glazed over as he digested this bit of wisdom. He sipped his drink and asked, “So what do you think the weather will be like tomorrow?”

Strikeout for me on a quickie definition of Buddhism.

This incident was a lesson for me, because it made me realize that someone, someday, might ask me for a thumbnail definition of Vedanta, and I'd better have one ready.

While Standing on One Foot

Such a situation is not unprecedented in the history of religion. A pagan is said to have asked the great rabbi Hillel, who flourished about a generation before Jesus, to summarize the Jewish Torah while standing on one foot. Hillel, in a masterpiece of verbal economy, replied, “Don't do to others anything you wouldn't want them to do to you.”

Jesus later rephrased this saying in positive terms, and thus created what has come to be known as the Golden Rule: “Do to others as you would have them do to you.” When asked which was the greatest commandment, he gave his own capsule definition of Judaism: “You shall love the Lord your God with all your heart and with all your soul and with all your mind; and your neighbor as yourself.”

That is all very fine for a concise definition of Judaism. Now, what about Vedanta?

At first I thought I might use the good old Vedantic standby, “Brahman is real and the world is unreal.” But then I’d have to explain what Brahman is, and that would take some time. Also, the person asking the question would most likely be a fellow American. Try telling the average American that the world is unreal and see how far you get. You might get away with it if you explained that, in Indian philosophy, nothing is considered “real” unless it is unchanging and eternal—but by the time you’d finished, your questioner would have fallen asleep.

So What’s This Vendetta?

Eventually I came up with an answer I thought was pretty good, but it would have led to dialogues like this:

Questioner: So, Bill, what is this Vendetta you believe in?

Me: Vedanta, not Vendetta.

Questioner: OK, Vendanta. What is it?

Me: (portentously): Vedanta believes that everything is God in disguise.

Questioner: (after a long pause): Errr...everything?

Me: Yes.

Questioner: Errrr...what about Hitler?

Me: Sometimes the disguise is pretty good.

A more complete definition would have to go for several sentences, and it might go like this:

> Everything is God in disguise. Sometimes the disguise is pretty good. We're part of the disguise, but we don't know it. Vedanta teaches us to see through the disguise and realize our true nature as part of God.

Another possible definition:

> The universe is a fabrication (maya) spun from pure Spirit (Brahman). Vedanta teaches us to look through the fabrication, see the Spirit, and realize that we are part of it.

Equally Present, Not Equally Manifest

Recently, though, I had occasion to read Swami Bhaskarananda's new book *Meditation, Mind and Patanjali's Yoga*, in which the swami summarizes Vedanta in a single line: "Divinity is equally present in all, but not equally manifest." To that one might add: "Vedanta teaches us to strive to manifest the divinity latent within us."

But when all is said and done, we don't have to worry about inventing a capsule definition of Vedanta, because Swami Vivekananda has already done it for us:

> "Each soul is potentially divine. The goal is to manifest this divinity within, by controlling nature, external and internal. Do this either by work, or worship, or psychic control, or philosophy—by one, or more, or all of these—and be free."

So if anybody ever asks you what the Vendetta is all about, try Swami Vivekananda's answer out on him and see how he responds. I bet he won't ask about the weather. ❑

Letters

Since 11th September we are all trying to come to terms with the unexpected turn of events. We all are becoming aware that what we face is not a short term threat but an unfolding process which will have long term consequences for all of us.

We can be sure that politicians, economists, social scientists, organised religions and crime prevention bodies are all working overtime to come up with solutions that can put a stop to further disruption of our way of life.

Yet none seems to have any clear answers. The politicians may think that the answer lies in resolving the Middle-East crisis, or maybe lies in throwing money at some of the poorer Muslim countries. The economists may suggest that the solution lies in switching away from Middle-Eastern oil resources. The social scientists may suggest that the problem lies with 'religions'; hence societies should move away from all religions and become strictly secular. The organised religions, especially the Abrahamic faiths, have very limited freedom in the way they can respond without inflaming the situation further. The crime prevention bodies can spend only so much overtime trying to prevent further atrocities—they keep their fingers crossed. How can they protect the whole of society?

The military action we see taking place cannot really be the solution. Most of us are aware that this is a knee-jerk reaction that addresses the symptoms rather than the root cause of the present malaise. We may succeed in removing one head of the hydra to be replaced by many more!

What is the root cause of this malaise? I suggest that despite appearances it is not political, economic or social—it is in fact *spiritual* in nature. Spirituality is a very potent force that has exercised a strong influence on mankind. If it is not appeased or handled correctly, it can turn perverse and run riot in our society. The tools that are required to address the issues are not military, political or economic; they have to be spiritual.

I would like to suggest two such spiritual tools which Ramakrishna-Vivekananda Hinduism offers the world. One is pluralism. With this tool different religions and different sectarian movements can live side by side with full integrity, without compromise, and yet without imposing their views on each other.

The other tool is undertaking a harsh rational review of all religions. Swami Vivekananda suggested that this is one thing religion can learn from science. It would upset most organised religions. But this process has to be carried out at some stage. . . It will come. . .

Only wholesome spirituality can displace perverse spirituality. Either we diagnose these symptoms correctly and act accordingly or allow things to escalate. This is not the first time that the world has been drenched in human blood in the name of religion! Mankind has passed through many difficult phases—the solution to the present predicament also lies within us.

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