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JANUARY 1985

# Prabuddha Bharata

OR

## AWAKENED INDIA



By Karma, Jnana, Bhakti, and Yoga, by one or more or  
all of these the Vision of the Paramatman is Obtained.

ADVAITA ASHRAMA  
MAYAVATI, HIMALAYAS



# Prabuddha Bharata

Started by Swami Vivekananda in 1896

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# Prabuddha Bharata

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No. 1

Arise! Awake! And stop not till the Goal is reached.

## INTEGRAL VISION OF VEDIC SEERS\*

*'Truth is one: sages call It by various names'*

को अद्वा वेद क इह प्र वोचत्  
कुत आजाता कुत इयं विसृष्टिः ।  
अर्वाग् देवा अस्य विसर्जनेना-  
था को वेद यत आबभूव ॥

इयं विसृष्टिर्यत आबभूव  
यदि वा दधे यदि वा न ।  
यो अस्याध्यक्षः परमे व्योमन्  
सो अंग वेद यदि वा न वेद ॥

1. Who really knows? Who can tell, whence this originated and whence<sup>1</sup> this creation? The gods came after this creation;<sup>2</sup> therefore who knows whence it arose?

*R̥g-Veda* 10.129.6

2. That from which this creation arose—does it support it or does not?<sup>3</sup> He who is the superintendent<sup>4</sup> in the highest heaven, He certainly knows or perhaps he knows not.<sup>5</sup>

*R̥g-Veda* 10.129.7

\* The *Nāsadiya-sūktam*, Hymn of Creation, is concluded here.

1. According to Sāyaṇa, the first 'whence' refers to *upādāna kāraṇa*, material cause, and the second 'whence' refers to *nimitta kāraṇa*, instrumental (or personal) cause.

2. According to one school of thought all the gods are only parts of the Virat, the manifested universe. The gods referred to here are the presiding deities of different organs, celestial spheres, etc, and not the Supreme Deity.

3. The question is whether the created universe got separated from the Creator (as an egg from a hen) or whether God remained

immanent in creation. It is answered in the famous passage *Tat sṛṣṭvā tadevānuprāvisat* in *Taittirīya Upaniṣad* 2.6.1

4. *Adhyakṣa*, the over-seer, the eternal Witness.

5. He knows not because He is Knowledge itself. Knowing implies objectification, but there is nothing apart from God and so He cannot be said to 'know' in the ordinary sense. Sāyaṇa's interpretation is: 'If He does not know, nobody else does'. Some scholars see in these lines signs of atheism and the germs of Sāṃkhya philosophy, but this is an unwarranted assumption which Sāyaṇa himself repudiates.

## TO OUR READERS

With this issue *Prabuddha Bharata* or *Awakened India* enters the ninetieth year of its publication. On this happy occasion we send our greetings and best wishes to our subscribers, readers, contributors, reviewers, publishers of books, friends and sympathizers for their continued support. May the new year bring them peace, prosperity and spiritual fulfilment !

'Media is the message' is an oft-quoted dictum of the well-known Canadian cultural historian Marshall McLuhan. Day by day the cultural world is shrinking and people of diverse races, cultures and beliefs are being brought into closer contact with one another. This has made

communication a most vital factor for the survival and welfare of mankind. We are witnessing an explosion in the development of mass media, and modern man is being constantly bombarded with an endless fusillade of ideas. In the midst of this confusing medley of voices he needs an undercurrent of living thoughts to remind him of the eternal verities and values, to guide him in finding the meaning of life and to egg him on to a higher goal. *Prabuddha Bharata* has been trying to fulfil this need. This gives us the courage to appeal to you to make this journal, one of the oldest of its kind in India, more popular among your friends and acquaintances in every way possible.

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## ABOUT THIS ISSUE

Swami Vivekananda's doctrine of the potential divinity of man provides the most satisfactory answer to the age-old question, why should we be moral? This is the theme of this month's EDITORIAL.

'Stylistics' is a relatively new branch of linguistics. Prof. K. Panchapagesan, Head of the Department of English, Vivekananda College, Madras, initiates a very interesting study of Swami Vivekananda's rhetoric in A STYLISTIC STUDY OF SWAMI VIVEKANANDA'S SPEECH.

SISTER LALITA: A GREAT TEACHING is an illuminating biographical sketch of Mrs. Carrie Mead Wyckoff who helped Swami Prabhavananda in founding the Vedanta Society of Southern California and had earlier helped Swami Vivekananda in preaching Vedanta during his second visit to America. The author Linda Prugh is

secretary of the Vedanta Society of Kansas City, Missouri, U.S.A.

Swami Jitatmananda of Ramakrishna Math, Hyderabad, focuses on INTUITION: THE COMMON BASIS OF SCIENCE AND VEDANTA by bringing together some of the statements of eminent physicists within the ambit of the Vedantic perspective.

EINSTEIN AND VIVEKANANDA is an attempt to demonstrate the harmony between modern science and Advaita Vedanta. The article contains several strikingly original concepts. Its author John L. Dobson is the founder of the San Francisco Sidewalk Astronomers. Those who want to know more about the subject may read John L. Dobson's book *Advaita Vedanta and Modern Science*, now in its second edition, published by the Vedanta Society, 5423 South Hyde Park Blvd, Chicago, Illinois 60615, U.S.A. The price of the book is only \$ 2.00.

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# WHY SHOULD WE BE MORAL ?

(EDITORIAL)

## *The moral question*

If a government engineer or a civil servant is offered a bribe by a contractor or a firm, why should he refuse to accept it? If a clerk can earn more money by cooking accounts, why shouldn't he do it? If a politician can gain power by liquidating his opponents, why should he hesitate? Where is the need for a student to study hard burning the midnight oil when he can easily pass his examinations by hoodwinking the invigilator? Why should husband and wife maintain marital fidelity? Why should a doctor follow the Hippocratic oath? Why should not a monk break his great vows? Why not avoid or escape from a difficult situation by telling lies? Blackmarketing, adulterating food-stuffs, exploiting the poor, betraying one's friends, maligning virtuous people, breaking promises, flirting, toadying—why not resort to any of these if that will be to one's advantage? In a word, why should we be moral?

It cannot be denied that a good deal of conventional morality is imposed by the arm of the law and the compulsions of social life. Many people act morally for fear of the police and public ridicule. Honesty is just the 'best policy'. Given the freedom, a large number of people would not hesitate to take recourse to dishonest, immoral or violent ways. A few years ago when the police went on strike in Mexico, apparently honest and decent-looking citizens were seen rushing into shops and making away with whatever they could lay hands on. A similar thing happened in an American city when the lights went off for a short time owing to a breakdown in power. When riots break out people behave like wild animals.

Morality, however, is not mere abstention from evil. It also means doing good. Love, kindness, sacrifice and goodness are natural human qualities and there is an urge in everyone to express them. Nevertheless, we often find good people suffering in life and cruel and selfish people thriving. We often find that our attempt to do good brings us sorrow and the people whom we help prove to be ungrateful. So here again the question arises: why should we do good?

Apart from these gross and obvious questions, there are many other subtle questions concerning morality lurking in the minds of everyone. Morality is a fundamental characteristic of humanity distinguishing man from animals. Human existence and morality are inseparable. Moral problems constitute at least one half of all the problems of man. It is therefore surprising that moral science now remains one of the most neglected branches of human knowledge.

In the West morality is nowadays believed to be the concern of psychologists, sociologists and clergymen. In India the emphasis on mystic experience has resulted in the downgrading of the importance of morality. For present-day Hindu children the chief sources of moral ideas are the works of western writers, social customs, family traditions, and stories from the *Rāmāyaṇa* and *Mahābhārata*. Everywhere, in the East and the West, the mass media—movies, radio, TV, newspapers and magazines—exert considerable influence in shaping the moral attitudes of people. Ignorance of the basic principles of moral science is a big gap in modern man's knowledge and a serious handicap in dealing with the complex problems of life.

A study of morality may not make people more moral, but it will make them think before they leap. It will provide them with a frame of reference to take proper decisions, enable them to confront the existential problems of life and will enlarge their awareness of the moral universe.

*Ethics—the science of conduct*

Before we try to find an answer to the two questions raised above—why should we be moral? Why should we do good?—it is necessary to understand what morality means. This necessarily entails a study of ethics. Also called Moral Philosophy, Ethics is one of the branches of human knowledge that deals with the value Goodness. In western thought Beauty, Truth and Goodness have been considered the ultimate values of life. The pursuit of Beauty is the main task of art; the pursuit of Truth has now become the exclusive preserve of science; similarly, social life is primarily concerned with the pursuit of Goodness. These practical disciplines are followed for their benefits in actual life: art gives us joy, science improves our material conditions, good social life gives us strength and peace. But these pursuits are based on some theoretical principles, some fundamental criteria, for the judgement of values. These criteria are studied as separate branches of knowledge. Aesthetics is the branch which deals with the criteria of Beauty, and Logic deals with the criteria of Truth. Similarly, Ethics deals with the criteria of Goodness.<sup>1</sup>

Ethics is sometimes regarded as a science, Moral Science. Lillie defines ethics as 'the normative science of the

conduct of human beings living in societies'.<sup>2</sup> Here science means 'a systematic body of knowledge about a particular set of related events or objects'. Science is of two types: positive and normative. Positive science deals with descriptions of natural phenomena; physics, biology, anthropology etc. belong to this type. Normative science deals with criteria or standards; ethics and logic belong to this type. In a positive science the main concern is knowledge, whereas in a normative science the main concern is judgement. Ethics is not a descriptive study of the moral conduct or manners and customs of people which belongs to positive sciences like psychology, sociology and anthropology. The business of ethics is to discover the basic principles by which we can decide the rightness or wrongness of conduct.

Strictly speaking, ethics is only a theoretical study (*adhyayana*). This does not mean that it has no practical use, but practical application is beyond its scope. Ethics discusses only the general principles of morality; the practical application (*ācarana*) of these general principles in particular situations in life belongs to a branch of knowledge known as 'casuistry'.<sup>3</sup> Then there is the problem of guiding people in moral conduct or in the art of good life. It may be called 'moralizing' or moral preaching (*pravacana*); this often degenerates into 'preachifying' detested by modern youths.

Ethics is the normative science of conduct. There are three aspects of conduct which are important in the field of moral-

1. Sometimes aesthetics, logic and ethics are clubbed together into one of the three divisions of philosophy known as Axiology, the other two divisions being Epistemology and Ontology.

2. William Lillie, *An Introduction to Ethics* (London: Methuen & Co; New Delhi: Allied Publishers, 1975) p. 2

3. Casuistry plays an important role in theocratic societies like those of Islam and Judaism. Christian society is no longer theocratic and the word 'casuistry' is now used in modern English in the pejorative sense of 'false reasoning'.



ity: willing (*icchā*), obligation (*vidhi*) and standard (*niyama*).

When we speak of moral conduct we mean only voluntary actions, and not circulation of blood, breathing and other wholly unconscious actions. A voluntary action is the result of the exercise of the faculty of will. It need not always remain a conscious action, for typing, cycling or piano recital can become so habitual that the person may not be aware of what he is doing. Some times people try to excuse their wrong actions by saying that these actions were not deliberately willed or chosen. So voluntary action is defined in a different way in ethics. Says Lillie, 'The question for ethics is not whether such an action was deliberately willed, but whether the doer could have prevented it by taking thought about it'.<sup>4</sup>

This takes us to the second aspect of conduct, obligation. One of the most distinctive characteristics of human existence is the moral responsibility that it entails. A person may evade any other type of responsibility but not moral responsibility. Behind every human action there is a basic sense of 'ought to'. The main problem in ethics is, not to know what people actually do, but to decide what they ought to do. This leads to the third aspect of conduct.

To decide what we ought to do or ought not it is necessary to fix a common standard of morality. The Chinese, the Indians and the Americans show much variation in their behaviour but there are some universal standards by which we can judge whether their actions are right or wrong, good or bad. The discovery and establishment of such universal frames of reference is the primary task of ethics. If you open any good book on ethics<sup>5</sup> you

will find a major part of it devoted to the discussion on various standards of conduct. As a matter of fact, the history of ethics is for the most part the history of the evolution of the moral standard or ideal.

#### *Types of ethical standard in western thought*

Most of the standards are based on two opposing theories about the main springs of human activity: reason and desire, form and content, the Right and the Good. According to one view the springs of human action are desires. 'Reason is perfectly inert and can never prevent or produce any action or affection', declared the agnostic British philosopher Hume. Most of the modern psychologists, Freudians especially, would agree with Hume. According to this view ethical life is essentially a struggle between opposite sets of desires. It is a struggle to attain a goal or end prompted by desires or instincts. So the central problem in ethics is, what is the Good? Those schools which conform to this view accept Happiness as the standard of ethical conduct. Hence this view is called Hedonism.

The other view is that reason forms the main source of ethical activity, and moral life is essentially a struggle to control desires with the help of reason. A life of passion is immoral, a life of reason is moral. Morality is conformity to the laws of reason. The main problem in ethics is, what is the Right? Those schools which conform to this view accept Law as the standard of ethical life.

The conflict between these two views may be traced all through the history of western thought. In ancient Greece Democritus (circa 460-370 B.C.) was one

4. *Introduction to Ethics* p. 4

5. John S. Mackenzie's *A Manual of Ethics* (New Delhi: Oxford University Press) has

remained for more than half a century the most popular textbook on ethics in India.

of the earliest to hold the first view, and Heraclitus (circa 530-470 B.C.) was one of the earliest to hold the second view. Then came the Sophists (c 450-400 B.C.) and Socrates, Plato and Aristotle who were chiefly responsible for laying the foundations of western ethics. They tried to harmonize the two opposing views. But after them ethical thought again got divided into the same rival schools. The Cyrenaics upheld hedonism (the view that the goal of life is happiness) whereas the Cynics upheld asceticism. Still later Epicureans and Stoics, respectively, continued these two traditions.

In medieval Europe ethical thinking was completely dominated by Christian theology, until Immanuel Kant (A.D. 1724-1804) shook its foundations. But both Christianity and Kant had one thing in common: they both believed in Law as the ethical standard and perpetuated the second of the two ancient views. The difference between them was this: whereas Christianity believed that moral law was something external, imposed upon man by God, Kant believed that moral law was an inherent property of the human soul. There is in every man an urge to act morally which Kant called the 'categorical imperative'.

The first view, embodied in hedonism and epicureanism, which regarded the goal of life as the attainment of happiness, did not develop much during the medieval period. It was revived in the nineteenth century by Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873) as the theory of Universal Hedonism or Utilitarianism which holds that 'we ought to aim at the greatest happiness of the greatest number of people'.

We have spoken of two rival views on ethical life: one which emphasizes the End, the Good, happiness; and the other which emphasizes the Law, the Right.

Attempts were made even by Plato and Aristotle to combine these two into a single ideal, and the result was the development of Perfection as the ethical 'standard'.<sup>6</sup> During the Renaissance this ideal was to some extent revived, and several Christian mystics strove for the ideal of spiritual perfection. Hegel (1770-1831) and evolutionists like Herbert Spencer (1820-1903) tried, in two different ways, to provide an ontological basis to Perfection as an ethical ideal. According to them morality is not a static concept; it evolved gradually out of animal instincts and is still evolving towards some higher ideal of perfection. Karl Marx (1818-1883) too held the same view but believed that when human society attained the culmination of communism, man would have attained ethical perfection which he conceived as complete self-realization through work.

#### *Ethical standards in Indian thought*

All the three western ethical standards—the Law, the Good and Perfection—have their counterparts, though not mirror-images, in Indian thought. What are the springs of human activity? As in the West, in India too this question gave rise to two rival views, one held by the Nyāya philosophers and the other by the Mīmāṃsaka philosophers of the school of Prabhākara.<sup>7</sup> The Nyāya view, which resembles western hedonistic theory, stresses the importance of an End (*iṣṭa*) in all acts of volition. According to it, every act of willing is determined by at least three conditions:

6. See, *A Manual of Ethics* Pp. 123, 130 and 195 ff

7. For a lucid discussion on this subject see, Dr. Balbir Singh, *Foundations of Indian Philosophy* (New Delhi: Orient Longman, 1971) ch. 5



1. the desire to attain some end or object (*cikīrṣā*);

2. the belief that it can be attained (*kṛtisādhyatā-jñāna*); and

3. the belief that this end or object is conducive to my good (*iṣṭasādhanatā-jñāna*), and that the attainment of the end is unaccompanied by a more powerful evil (*balavadaniṣṭa-ananubandhitva-jñāna*).

It is the end that determines all voluntary action—but it is the end as chosen by the agent and not as an external impelling force conditioning his behaviour. This is true not only regarding optional deeds but also regarding obligatory duties.

The Prabhākara Mīmāṃsakas, whose view resembles Kant's theory of categorical imperative, stress the compelling power of moral law. They believe that the springs of human action lie in *kāryatā-jñāna* (knowledge of what ought to be done),<sup>8</sup> and not *iṣṭasādhanatā-jñāna* (knowledge of an end) as the Naiyāyikas hold. We act out of a sense of obligation, as a result of our thinking 'I must do it, it is my duty to do it'. Everyone has in him a sense of duty; the only problem is to choose between different duties some of which are mutually contradictory. The Mīmāṃsaka solution to this problem is to follow the Vedas in this respect. The Vedas ask us to do certain things, and not to do certain things. The best way to lead an ethical life is to live in accordance with the Vedic injunctions and prohibitions.

The Vedantin's conception of ethical standard is Perfection which is a synthesis of the two ideals of the Good and the Right discussed above. Perfection, however, is not to be sought as an end, as the Nyāya philosophers think, for perfection is inherent in the self of man. This inherent

perfection remains veiled by ignorance. The only right thing to do is to strive to remove this ignorance. Says Śrī Śaṅkara, 'Therefore the only thing to be done is to eliminate what is superimposed upon Brahman through ignorance; there is no need to make any effort to realize Brahman, as It is so well known.'<sup>9</sup>

The problem of evil (*adharmā*) is tackled by the three schools in three different ways. According to Nyāya philosophers everyone chooses the good (*iṣṭa*), that is, what he regards as good. When a person does something bad, he does it because of the mistaken notion that it is for his good. This was more or less what Socrates also taught. He identified virtue with knowledge and believed that people did wrong things only because of inadequate knowledge. To provide this correct knowledge was the chief endeavour of Plato and Aristotle.

The Mīmāṃsaka position is that man cannot know good or evil without the help of scriptures, and to follow any path other than that prescribed by the scriptures will end in evil and is therefore evil. This is the basic view adopted in Islamic and Judaic ethics. Christianity too subscribes to this view with the additional clause that since the 'original sin' has damaged man's soul he will do, left to himself, nothing but evil.

In both the rival Indian schools mentioned earlier ignorance is considered the *cause* of evil—either ignorance of the end or ignorance of the scriptural laws. Vedanta goes one step farther and says that ignorance itself is the evil. According to it, good and evil are both products of ignorance, and morality is a relative concept.

8. *Kāryatā-jñāna* may mean either what can be done (*mayā idam kartum sakyate*) or what ought to be done (*mama idam avasyam kartavyam*). It is the latter sense that Prabhākaras accept.

9. तस्मात् अविद्याद्यारोपितनिराकरणमात्रं ब्रह्मणि कर्तव्यं, न तु ब्रह्मविज्ञाने यत्नः, अत्यन्तप्रसिद्धत्वात् ॥  
Śaṅkara, Commentary on the *Gītā* 18.50

The chief concern of Vedanta is not morality but how to transcend it.

### *Dharma and karma*

We have thus far discussed only *what* morality is, not *why* we should be moral. We now return to the latter question with which began our discussion. Why should we be moral? Two kinds of answers, one pragmatic and the other existential, have been provided by the four major world cultures: the Hellenic, the Hebraic, the Indian and the Chinese.

The pragmatic view is that there is a moral order or law governing the universe and only by living in harmony with it can man attain peace and prosperity; disharmony will lead to suffering. This is the reason why we should be moral.

In India this view has prevailed from prehistoric to present times. The belief during the Vedic period was that there is a single 'cosmo-theanthropic' order which governed both physical events and moral experiences; it was called *ṛta*. About this Prof. Hirianna says:

There is implicit here a belief in the relation between the good of the universe and that of the individual...It implies that no man can live for himself, and that the individual should adjust his conduct to the nature of the world, having particularly in view its moral character...We see that the idea underlying it is the relation between the world of fact and the world of value—between right as physical order and right as moral rectitude.<sup>10</sup>

How to live in harmony with *ṛta* was the chief moral concern of the Vedic man. He found this could be done by converting life into a rhythm of exchange between individual life and universal life. Man must return, through selfless work, all that

he receives from the universe. This refunding was called *yajña* (sacrifice) and was symbolized by the ritual tending of fire in the altar which everyman maintained. Even the gods had to follow *ṛta* which was independent of and superior to everything.

The practice of *yajña* led to the discovery of the law of *Karma*, according to which every action produces a cosmic effect (called *apūrva*) which returns in due course to the doers as *karmaphala* or the fruit of his action; good action brings happiness, bad action brings suffering.<sup>11</sup> This belief converted *ṛta* as a flexible harmony and divine-human participation into a rigid draconian law called *Dharma* which was beyond human control. After the Vedic period the moral life of Indians has been dominated by the fear of *Karma* and the anxiety to escape from it. It might have been partly caused by the influence of Buddhism and Jainism but one can see it clearly in the *Mahābhārata*. Few people now have the hope that good actions will bring prosperity and happiness (this is partly because of the notion that the purpose of virtuous action is *only* to purify the mind) but most people have the fear that evil actions will produce evil results. So, to the question why we should be moral, most Indians would answer, 'For fear of *Karma*'.

The concept of *Tao* developed in ancient China is in many ways quite similar to that of the Vedic *ṛta*. But, instead of the principle of *yajña*, the Chinese stressed simplicity, spontaneity, absence of artificiality and other means of attaining harmony with the cosmic moral order. Though overshadowed by the pragmatic humanism propounded by Confucius, Taoism considerably influenced the moral attitudes of the

10. M. Hirianna, *Indian Conception of Value* (Mysore: Kavyalaya Publishers, 1975) p. 151

11. The beginnings of this belief may be found even in the Upaniṣads, like the *Bṛhad-āranyaka* (4.4.5) and the *Katha* (5.7).



Chinese and the development of Zen Buddhism.

What comes nearest to *ṛta* and Tao in western thought is the ancient Greek concept of Logos (cosmic reason) propounded by Heraclitus and developed by the Stoics. The latter conceived the world as a living unity, perfect in the adaptation of its parts to one another and to the whole, and animated by an immanent and purposive universal reason called 'logos spermatikos'. This logos gave order and intelligence to the universe and maintained its moral balance. This doctrine, however, never struck roots in western culture and was replaced by the Christian view of morality. The basis of Christian morality is the Jewish idea of morality as a contract (covenant, wrongly called 'testament') between God and man. God gave Moses ten Commandments and promised him that He would protect the tribe as long as they followed those commandments. So to the question why we should be moral, the natural Christian response would be, 'Because that's God's command'. A man should love and do good to others because that again is another fiat of God. To disobey God is to invoke His wrath and punishment.

The Islamic view of morality is similar to the Judeo-Christian view but rejects its contractual nature. Thus we see that the so-called pragmatic response to the moral question is based on fear. In the Judeo-Christian tradition morality is based on fear of God, whereas in the Indian (including Hindu, Buddhist and Jaina) tradition it is based on fear of Dharma or the law of Karma. In the West a virtuous man is described as God-fearing; in India he is described as *dharma-bhīru* (one who is afraid of transgressing Dharma).

#### *Potential divinity of the soul*

The question why we should be moral

can be answered from a totally different standpoint which is free of theological tangle. If morality is only a law of nature or God, how is it that animals do not respond to it? Morality is not merely seeking some good as an end; it also entails some responsibility. Man alone feels moral responsibility. This shows that there is something unique in the soul of man.

In the course of his investigation into the nature of human knowledge Immanuel Kant discovered an important truth: there is in every human soul a self-acting, autonomous moral law which he called the categorical imperative. Ordinary laws of nature are mere statements of facts; they are not imperatives or injunctions. Water boils at 100°C—this is a law of nature but it does not compel you to boil water before you drink it. Morality is an imperative because you feel compelled to act morally; it is also a law because it is universally found in all human beings. Albert Schweitzer once said that he found no difficulty in preaching his religion in the forests of Africa because he found that even the most primitive tribal had the moral sense.

It is the categorical imperative that manifests itself as conscience and inner voice. But what exactly is it? In some passages in his *Critique of Practical Reason* Kant seems to regard it as God's command. Beyond that the true nature of the categorical imperative was a mystery to him, as he admitted in his oft-quoted statement: 'Two things fill me with ever new admiration and awe: the starry heavens above and the moral law within.'

However the answer had been found by Mencius (c 372-289 B.C.) in China about two thousand years before Kant. Mencius said that we should be moral because our true nature is pure; we should be good because our original nature is good. About

Mencius's unique contribution Fung Yu-lan writes:

Every man should, without thought of personal advantage, unconditionally do what he ought to do, and be what he ought to be. In other words, he should 'extend himself so as to include others', which, in essence, is the practice of *jen* (humanity). But though Confucius held these doctrines, he failed to explain *why* it is that a man should act in this way. Mencius, however, attempted to give an answer to this question, and in so doing developed the theory for which he is most famed: that of the original goodness of human nature.<sup>12</sup>

Mencius believed that the original nature of man is good and it is this that prompts him to be good and seek good (through what Kant called the categorical imperative.) Owing to wrong knowledge and ways of living, this original nature gets 'lost'. The chief purpose of education should be 'to seek the lost mind'. The difference between sages and ordinary people is that we often 'discard' our true nature whereas the sages preserve it. 'The superior man is one who does not lose his child's heart', he said.

But Mencius warned that man has only 'seeds' of good, not goodness itself. These 'seeds' must be developed and cultivated to the extent that man can serve heaven and fulfil his destiny. Mencius states:

Let him know how to give these 'seeds' full development and completion. The result will be like a fire that begins to burn... If they are denied this development, then they will not suffice even to serve their own parents... With proper nourishment and care, there is nothing that will not grow, whereas without proper nourishment and care, there is nothing that will not decay.<sup>13</sup>

How surprisingly close these ideas of Mencius come to Swami Vivekananda's

doctrine of the potential divinity of the soul! 'Each soul is potentially divine, the goal is to manifest the divinity within', declared Swami Vivekananda. While Mencius speaks of 'seeds', Swamiji speaks of potentiality; while Mencius speaks of developing the 'seeds', Swamiji speaks of manifesting the potential divinity. But both believed that purity and goodness are inherent characteristics of the soul and morality is nothing but the assertion of his true nature. In one of his famous lectures on the real nature of the soul Swamiji said:

That is your own nature. Assert it, manifest it. Not to become pure, you are pure already. You are not to be perfect, you are that already. Nature is like that screen which is hiding the reality beyond. Every good thought you think or act upon is simply tearing the veil, as it were; and the purity, infinity, the God behind, manifests Itself more and more.<sup>14</sup>

The doctrine of Mencius, however, is incomplete. What is the original nature of man that is good? Mencius did not know. He did not investigate further but stopped with mind. But at least a few centuries before Mencius the Upaniṣadic sages had carried out that investigation. They found that the mind consists of subtle matter or energy, is constantly changing and is subjected to various forces, internal and external. Hence it cannot be the eternal, pure, real nature of man. They discovered that beyond the ordinary mind there is the self-luminous, eternal, untainted, immortal Spirit, the true Self, Atman; this alone is the real nature of man.

Why should a man be moral? Because purity is man's true nature which is the Atman. Why should a man do good? Because this Atman is one and indwells all beings. When a person does something

12. Fung Yu-lan, *A Short History of Chinese Philosophy* (New York: Macmillan Co. 1983) p. 69

13. *Book of Mencius* 7A: 1:2-3

14. *The Complete Works of Swami Vivekananda* (Calcutta: Advaita Ashrama. 1976) Vol. 2, p. 82



immoral or selfish he ceases to be himself, he lowers his own dignity, he loses the glory of his own self. Morality is not a matter of fear, of compulsion, of subservience to an external force. It is simply a matter of being what one really is, simply radiating the true light of one's own soul all around, under all circumstances, at all times.

The doctrine of the eternal, pure, self-luminous and infinite Atman was developed in no other culture in the world; it is

India's priceless gift to mankind. But even in India this doctrine had never been made the basis of a universally applicable code of ethics until Swami Vivekananda imposed upon himself that task. One of the great contributions of Swami Vivekananda to world culture is to free morality from fear of all kinds and to lay the foundation for a new theory of ethics based entirely on the potential divinity of the soul which will make morality a source of strength, joy and a means of realizing all the possibilities of the human soul.

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## A STYLISTIC STUDY OF SWAMI VIVEKANANDA'S SPEECH

PROF. K. PANCHAPAGESAN

### *An orator by divine right*

Swami Vivekananda's eloquence attracted many eminent thinkers, writers and philosophers. To Romain Rolland 'His words are great music phrases in the style of Beethoven, stirring rhythms like the march of Handel Choruses...'<sup>1</sup> Nehru speaks in glowing terms: 'Because there was fire in his heart the fire of a great personality coming out in eloquent and ennobling language—it was no empty talk that he was indulging in.'<sup>2</sup> Miss S. E. Waldo says that everyone 'hung breathlessly on his every word'.<sup>3</sup> Considering the fact that English was a foreign language to

Swamiji, Tolstoy wonders how 'he has learnt all its subtleties!'<sup>4</sup> Newspaper reporters frequently referred to him as 'an orator by divine right'.<sup>5</sup> One can go on citing profusely references to Swamiji's oratory. The aim of this paper is not to labour the obvious but to make a sincere effort to try to fathom the unfathomable. A careful and close scrutiny of his style reveals his profound mastery of the English tongue.

Michelangelo's paintings may amaze you as an exquisite work of art although they are only a product of colours and the imagination of the artist. Beethoven's Symphony transports you into realms of joy; it is composed of notes. Keats' 'Ode to a Nightingale' may touch chords of the aeolian harp in your ears, but it is essentially verbal magic. Even the profoundest

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1. Romain Rolland, *The Life of Vivekananda and the Universal Gospel* (Calcutta: Advaita Ashrama, 1970) p. 113

2. *World Thinkers on Ramakrishna-Vivekananda* ed. Swami Lokeshwarananda (Calcutta: The Ramakrishna Mission Institute of Culture 1983) p. 44

3. *Reminiscences of Swami Vivekananda* By his Eastern and Western Admirers (Calcutta: Advaita Ashrama, 1961) p. 128

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4. Quoted in *World Thinkers on Ramakrishna-Vivekananda*, p. 46

5. *Swami Vivekananda in Indian Newspapers* (1893-1902) ed. Sankari Prasad Basu and Sunil Bihari Ghose (Calcutta: Dinesh Chandra Basu Bhattacharya and Co.)

intuitions of great men produced by the realization of the most intensely personal moments of joy, when they break forth in utterances, become words clothed with power and glory. By these words one is immediately and intimately affected. Where does the power lie? There is a strange alchemy in their use of language. The deeper the analysis of the language, the greater the joy that results from it.

Swamiji's language lends itself to a thorough analysis. Many an eyebrow may be raised as much as to wonder if this kind of study is not anything short of sacrilege. Swamiji himself was a devout student of science. Even the realm of the spirit came in for a scientific analysis in the hands of Swamiji. His was a rational, inquiring mind. 'Religion deals with the truths of the metaphysical world just as chemistry and the natural sciences deal with the truths of the physical world.'<sup>6</sup>

It is marvellous to note Swamiji's sound understanding of the springs of power in a language and the intimate relation between language and life. Referring to the prevalent style of the Bengali language, Swamiji wrote:

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I shall try to cast the Bengali language in a new mould. Nowadays, Bengali writers use too many verbs in their writings; this takes away the force of the language. If one can express the ideas of verbs with adjectives, it adds to the force of the language; henceforth try to write in that style. Try to write articles in that style in the *Udbodhan*. Do you know the meaning of the use of verbs in language? It gives a pause to the thought; hence the use of too many verbs in language is a sign of weakness, like quick breathing, and indicates that there is not much vitality in the language; that is why one cannot lecture well in the Bengali language. He who has control over his language, does not make frequent breaks in his thoughts. As your physique has been rendered languid by living on

a dietary of boiled rice and *dāl*, similar is the case with your language. In food, in modes of life, in thought, and in language, energy has to be infused. With the infusion of vitality all round and the circulation of blood in all arteries and veins, one should feel the throbbing of new life in everything—then only will the people of this land be able to survive the present terrible struggle for existence; otherwise the country and the race will vanish in the enveloping shadows of death at no distant date.<sup>7</sup>

Eminent linguists believe that language and thought are inseparable. 'A writer's style is often expressed as much by the grammatical clauses and structures he prefers as by the choice of words.'<sup>8</sup> Our study here is restricted to the 'Paper on Hinduism' that Swami Vivekananda presented at the famous Parliament of Religions held in Chicago in September 1893.

#### *Form and Content*

Even the opening paragraph of this shows a remarkable fusion of form and content. Hinduism is compared to an ocean, while the various sects that rose in India are compared to the turbulent waves of the mighty ocean. After a boisterous disturbance, the waves are ultimately sucked into the mother faith. Here is the passage:

Three religions now stand in the world which have come down to us from time prehistoric—Hinduism, Zoroastrianism and Judaism. They have all received tremendous shocks and all of them prove by their survival their internal strength. But while Judaism failed to absorb Christianity and was driven out of its place of birth by its all-conquering daughter, and a handful of Parsees is all that remains to tell the tale of grand religion, sect after sect arose in India and seemed to shake the religion of the Vedas to its very foundations, but like the waters of the seashore in a tremendous earthquake it receded only for a while, only to return in an

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7. Ibid 7(1972): 134

8. Quoted in Raymond Chapman, *Linguistics and Literature, An Introduction to Literary Stylistics* (London, Edward Arnold, 1973) p. 44

6. *The Complete Works of Swami Vivekananda* (Calcutta, Advaita Ashrama, 1978) 6:81



all-absorbing flood, a thousand times more vigorous, and when the tumult of the rush was over, these sects were all sucked in, absorbed, and assimilated into the immense body of the mother faith.<sup>9</sup>

Swamiji uses repetition of words, phrases and clauses in such a way that a movement is produced which takes us forward and backward. By means of cross-reference and recall, Swamiji creates the surging movement of the waves in his language. The following language elements create the effect of 'back-to-front' movement.

1. The order of words is inverted: instead of 'prehistoric time', we have 'time prehistoric'.

2. The religions are first arranged in the order: Hinduism, Zoroastrianism and Judaism. In sentence 3, the order is reversed: Judaism, Zoroastrianism and Hinduism.

3. In sentences 2 and 3, the repetitions of the words, phrases or clauses swing forward and backward.

'All of them prove' carries us back to 'They have all received', in the earlier context.

The repetition of the third person plural pronoun 'their' with abstract nouns like 'survival' and 'internal strength' (their survival, their internal strength) causes a backsliding effect.

The adjective 'tremendous' (earthquake) has cross-reference in 'tremendous shocks' occurring earlier.

On the clause level, there is an instance of the sentence carrying us backward and forward. 'While a handful of Parsees is all that now remains' takes us back to 'While Judaism failed to absorb...', thus flinging us back.

Another significant feature is the contrast between 'receded' and 'return' and between 'arose' and 'depths'. Swamiji again places the adjunct 'like the waters

of the seashore' in the beginning and postpones the verb 'receded'. The use of two additive conjunctions 'and' followed by a 'but' which is an adversative conjunction creates the effect of closing in and breaking away. The medium and the message are beautifully blended in this opening paragraph.

#### *Use of personal pronouns*

Secondly, Swamiji's use of the personal pronouns is very significant. He opens the speech with 'Sisters and Brothers of America' and thus identifies himself with them in a social context. Gradually, he includes them in a spiritual context.

In sentence no. 34 of the 'Paper on Hinduism' he says: 'I am a spirit'. The first person singular is used to convey intimate significance of the truth to himself. In sentence no. 68, 'the Hindu believes that he is a spirit', refers to every other Hindu. In sentence no. 104, he changes the person. He makes it second person plural to include all the Americans. 'You are souls immortals'. He began by calling them brothers and now he has made them heirs of spiritual bliss, much closer to the Hindu. He has indentified them spiritually now, not merely socially.

#### *Rhythm*

Rhythm in speech is one of the most important prerequisites of an orator. Swamiji for the most part uses a rambling rhythm which endows the speech with immense variety. In the language of linguistics, a sense group in a sentence is called a 'syntagm'. There may be a number of sense groups in a sentence.

Let us take the first sentence, 'Three religions now stand in the world which have come down to us from time prehistoric—Hinduism, Zoroastrianism and Judaism.'

9. *Complete Works* 1 (1977): 6

The sense-groups are as follows: (The number against each sense group indicates the number of syllables.)

Three religions	— 4
now stand in the world	— 9
which have come down to us	— 6
from time prehistoric	— 6
Hinduism	— 4
Zoroastrianism	— 6
and Judaism	— 5

Swamiji's sentences mostly consist of irregular syntagmatic structures but in the midst of such sentences occur one or two sentences wherein the sense-groups are fewer in number. Such sentences stand out from the rest of the long, complex and compound sentences

I am a spirit	— 5
living in a body	— 6
I am not the body	— 6

These two sentences occur after nearly 30 complex sentences. Swamiji makes these sentences simple not by accident. He encapsulates the salient belief of the Hindus, for the sake of the American listener.

Again, after 30 sentences, in sentence no. 69, he changes the syntax. He makes the object the theme of the sentence.

Him the sword cannot pierce	— 7
Him the fire cannot burn	— 6
Him the water cannot melt	— 7
Him the air cannot dry	— 6

There is an incantatory effect in the succession of 'Him'. The syntagmatic structure is more or less regular. These sentences underline the idea of immortality of the soul which is sacred and inviolable to the Hindus.

This line reminds us of a line in Milton's *Paradise Lost*, Book I. Swamiji, it may be remembered, was a keen student of Milton.

Him the Almighty Power  
Hurl'd headlong flaming  
from the ethereal sky,  
with hideous ruin and combustion,  
To bottomless perdition...

Swamiji achieves a stylistic effect in changing the syntax of the sentences.

### *Use of the singular and the plural*

The most important linguistic feature in the 'Paper on Hinduism' is the use of singular 'The Hindu' in preference to the plural 'The Hindus'. Swamiji uses the singular form 16 times as against only six uses of the plural.

1. The Hindu believes that he is a spirit. (Para 13)
2. The Hindu is sincere. (Para 14)
3. The Hindu does not attempt to explain why one thinks one is the body. (14)
4. The Hindu says, 'I do not know'. (14)
5. The Hindu does not want to live upon words and theories. (23)
6. The Hindu is only glad that...forcible language. (31)
7. 'So my idol will punish you...', retorted the Hindu. (33)
8. 'This is why the Hindu uses an external symbol when he worships'. (35)
9. The whole religion of the Hindu is centred in realization. (36)
10. To the Hindu, man is not travelling...to higher truth. (38)

The reader may refer to Paras 39,40,41 and 42 for more examples. In the following sentences, Swamiji has used the plural form:

1. The Hindus have received their religion through revelation, the Vedas. (4)
2. We have been told that the Hindus shirk the question (14)
3. So far all the Hindus are agreed (26)
4. The Hindus have associated the ideas of holiness, purity, truth, and omnipresence and such other ideas... (36)
5. The Hindus have discovered that the absolute can only be realized (39)
6. The Hindus have their faults. (40)

On closer analysis, it will be clear that Swamiji has used emotionally connotive words with the singular 'The Hindu' and has used purely referential words with the plural 'The Hindus'. The verbs that go



with the singular denote a state of mind or conviction or an emotional stance such as 'is sincere', 'can believe', 'is only glad', etc. Sometimes, a negative emphasis is laid on the main or subordinate clause as in: 'The Hindu says, "I do not know"', or in 'The Hindu does not want'. Wherever Swamiji has used 'only' or 'whole' there is great authority or self-assurance.

Wherever he has used the plural mere referential verbs like 'have associated' or 'discovered' or 'are agreed' go with the subject.

It is clear from what has been mentioned above that Swamiji's sense of pride and exaltation are made perceptible in his use of the singular. Compare what follows:

'If at present the word Hindu means anything bad, never mind; by our action let us be ready to show that this is the highest word that any language can invent ...I am one of the proudest men ever born, but let me tell you frankly, it is not for myself, but on account of my ancestry.'<sup>10</sup>

#### *Use of the question form*

Another noteworthy linguistic feature is Swamiji's use of 'Wh-' questions, that is, questions like why, what, where, how etc.

It is customary with Swamiji to shoot questions at the audience and try to answer them. This is to carry the listeners with him.

Where is the common centre upon which all these widely diverging radii converge? (Sentences 5 and 6)

The question is intended to clear an apparent contradiction that might offer itself to an American: How can Hinduism represent idolatry, atheism and agnosticism?

Why does a just and merciful god create one happy and another unhappy? (Sentences 43 and 45)

The contradiction here is: A merciful God versus unhappy creations.

How can the pure, the absolute change even a microscopic particle of its nature? (Sentence 80)

Pure souls versus impure body. There are a few more examples which the reader can find for himself.

Swamiji employed consciously such questions in order to clear any idea of paradox or contradiction that was likely to arise in the mind of the foreign hearer.

#### *Lexical items*

Finally, the lexical items (i.e. content words) used by Swamiji in this lecture may be classified in two sections.

(1) lexical items from the register of science and

(2) lexical items from the register of Christianity and Bible.

A good orator should manipulate the beliefs, culture and inhibitions of the listeners to his own advantage. Swamiji knew that he was talking to people who swore by science and the majority of whom were Christians. It is interesting to note that the high spirituality of Vedanta is interpreted in terms of scientific laws. At the same time, when he switches over to popular Hindu religion, his lexical items (content words) are borrowed from the Bible and Christianity. By this means he enlists a sympathetic hearing.

(1) Lexical items from the scientific register:

Law, matter, force, discoveries, science, scientific parallel, combination, dissolution, compound, radii, gravitation, energy, verification, proof, theory, circumference, circle, cause, effect, particle, centre, unity, physics.

(2) Lexical items from the register of the Bible and the Christian literature:

Ye, thou, heareth, art, the Almighty, Thy, Thee, Lord, Mercy, 'The Father in Heaven', 'Catholic Church', 'Protestants', 'Omnipresent', Cross, holy, scriptures, kneeling, sin, sheep, the Fire of Inquisition, father and Son, Christ.

This is only a preliminary study of

10. Ibid 3 (1973): 368

Swamiji's mastery of the elements of the English language and is by no means exhaustive. His thoughts are reflected in the words, phrases, clauses and other syntactic features. He is a veritable gold mine giving out its secrets only to those who care to sit at his feet in all humility and pray for enlightenment.

## SISTER LALITA : A GREAT TEACHING

LINDA PRUGH

Religion is realisation; not talk, nor doctrine, nor theories...It is being and becoming, not hearing or acknowledging; it is the whole soul becoming changed into what it believes. That is religion.<sup>1</sup>

We may read volume after volume in an attempt to grasp a little of Swami Vivekananda and his message. At times we may even feel that we are at one with those high truths which he imparted. Still, how few can claim to understand Swami Vivekananda! Many of us harbour the notion that we would have instantly recognized the Swami's magnitude had we only met him.

Ironically, out of the thousands who met him or who heard him speak in America, only a handful can be counted as having actually become his followers. These were the fortunate few who had the blessed privilege of living with him and sharing his day-to-day life. Because he lived always steeped in God-consciousness his very presence was elevating, and while he appeared to be engaged in very ordinary actions, he created such a tremendous spiritual atmosphere that those around him were spontaneously lifted to spiritual realms and sooner or later their whole life underwent a radical transformation. Sister Lalita was one of those fortunate souls

whose lives were illumined by the touch of Swami Vivekananda.

Although she grew up with ordinary aspirations through marriage and family life, she soon became an extraordinary devotee who, as one of the Mead Sisters of Pasadena, California, not only knew Swamis Vivekananda and Turiyananda, but also helped Swami Prabhavananda establish the Vedanta Society of Southern California by offering her own home for that purpose. For the last twenty years of her life she lived at the Vedanta Society, located in Hollywood. There were some who regarded Sister Lalita as a saint, but these were few, for few really knew her, she was so retiring. It simply was not in her nature to be loud or entertaining. She only lived her life, quietly trying to follow the teachings of Sri Ramakrishna, Swami Vivekananda and Vedanta. As one said who knew her at the centre in Hollywood:

You had to *discover* Sister Lalita. It was very easy to pass her by and go where all the activities were, but if you paused and got to know her, the least little thing you did for her made you feel rewarded. I don't know how to explain it, but you felt *good* if you ever did anything for Sister.<sup>2</sup>

1. *The Complete Works of Swami Vivekananda* (Calcutta: Advaita Ashrama, 1976) vol. 2, p. 396. (Henceforward cited as *Complete Works*)

2. Swami Chetanananda, 'Reminiscences of Sister Lalita': Recorded interviews with friends of Sister Lalita, August 1983. (Archives, Vedanta Society of St. Louis) Unless otherwise noted, this is the source for all quoted reminiscences in this article.



But few people go where the quiet is or understand silence in others. Many people feel threatened by silence and try to either fill it up with talk or simply avoid it. But as Swami Vivekananda said in his talk 'The Ideal of a Universal Religion' delivered at Pasadena:

Those who are really workers, and really feel at heart the universal brotherhood of man, do make little sects for universal brotherhood; but their acts, their movements, their whole life, show clearly that they in truth possess the feeling of brotherhood for mankind, that they have love and sympathy for all. They do not speak, they do and they live. This world is full of blustering talk. We want a little more earnest work, and less talk.<sup>3</sup>

Sister Lalita, whose original name was Carrie Mead Wyckoff, had heard and been inspired by this lecture of Swami Vivekananda as well as most, if not all, of the other talks he gave in southern California between December 8, 1899 and mid-February 1900. Hundreds of other people heard them too but Lalita was truly blessed, for she not only heard Swamiji's inspiring lectures, but also had his holy company when she, her father, and her two sisters (Alice Mead Hansbrough and Helen Mead) became his hosts in their Pasadena home for about six weeks. This meant that she had daily personal contact with Swamiji and was thus able to watch and learn from his day-to-day actions which were in fact subtle demonstrations of his grand teachings.

Swamiji once said: 'As I grow older I find that I look more and more for greatness in *little* things. I want to know what a great man eats and wears, and how he speaks to his servants.'<sup>4</sup> It must have undoubtedly been those little details of his

own life that Lalita most carefully treasured in memory when he was gone, and, being the humble person that she was, it was most likely his more modest perfections that she dared set as goals in her own life. But however humble might have been her goals, she did in fact go far beyond them.

It is known that Helen worked in an office and so was absent during most of the time Swami Vivekananda stayed at the Mead home. She did, however, record some of his lectures. Alice had a four-year-old daughter, Dorothy, to care for, and her efforts on Swamiji's behalf were mostly in the nature of making speaking arrangements. Sister Lalita, who was a widow, had a son, Ralph, who was seventeen and at school all day; so it was she who had the privilege of attending to most of the domestic needs of Swamiji. At this time she was about forty-one years old. Though the Meads had a live-in housekeeper, Sister did much of the cooking and tidying-up, and it is probable that Swamiji taught her in innumerable ways a great deal about how to work while he was there.

One day he said to Lalita: 'Madam, you work so hard that it makes me tired. Well, there have to be some Marthas, and you are a Martha.'<sup>5</sup> In later years in Hollywood, she was described by some as being 'deliberate' and by others as being 'pokey' in everything she did, but surely she had simply learned how to work from Swamiji who stressed concentration on the means. In 'Work and Its Secret' he had said:

One of the greatest lessons I have learnt in my life is to pay as much attention to the means of work as to its end...With the means all

3. *Complete Works* (1976), 2:380

4. *The Complete Works of Sister Nivedita* (Calcutta: Secretary of Ramakrishna Sarada Mission, 1972) vol. 1, p. 137

5. cf Marie Louis Burke, *Swami Vivekananda in America—His Second Visit to the West—New Discoveries* (Calcutta: Advaita Ashrama, 1973) p. 229

right, the end must come. We forget that it is the cause that produces the effect; the effect cannot come by itself; and unless the causes are exact, proper, and powerful, the effect will not be produced...At the same time, we must not be attached. That is to say, we must not be drawn away from the work by anything else: still, we must be able to quit the work whenever we like.<sup>6</sup>

Time and time again Lalita must have watched as Swami Vivekananda carefully prepared dinners for the Mead family. It is said that he liked to cook Indian dishes and that he would often sit cross-legged on the kitchen floor with a wooden bowl and grind certain spices which he would then prepare in a particular series of steps on the stove.<sup>7</sup> Such a model of *concentration on the means* would have found a welcoming home in a mind like Lalita's.

However, one of Sister Lalita's life-long regrets concerned Swami Vivekananda and work. Swamiji, in the quote cited, had stated that we must not be drawn away from work by anything else, but he had also said that *we must still be able to quit work when we should*. And this was something she had not always done with him. Several times during her Hollywood years she mentioned to a friend: 'Sometimes Swamiji would say to me, "Madam, come and talk with me", and I'd say, "Swamiji, I'm too busy". To think I didn't sit and talk with Swamiji when I could have!' When Swamiji referred to her as a Martha, perhaps he had been warning her about attachment to work. In any event, she must have, at some point, set her mind to mending that balance between concentration on and detachment from work, for it was later recalled by her sister Alice that there were times when asked by Swamiji to stop her work and stroll with him in the garden,

Lalita would do it and that he would chant Sanskrit verses or sing Bengali songs.<sup>8</sup>

It has been said that 'the impact of Swami Vivekananda's spiritual power was such that the Meads all felt as if Christ were in their midst.'<sup>9</sup> However, when asked once, 'How was it really to live with Swamiji?', Sister simply remarked: 'You know, he was just like a brother. He raised our consciousness up so we didn't feel while we were with him anything but just love and joy. And he was so much fun!'

Swamiji taught by doing, by being what he taught. His life was, therefore, a constant demonstration of his teachings. Once on a picnic with the three sisters and some other devotees, Swamiji told them: 'If you want to reform John Doe, go and live with him; don't try to reform him. If you have any of the Divine Fire, he will catch it.'<sup>10</sup>

One day an incident occurred which might be considered the spiritual turning point in Sister Lalita's life. She later described it to a friend in Hollywood who recounted it in the following way:

At the house in Pasadena, the bedrooms were on the second floor. Steep, narrow steps connected the first and second floors. On morning they were all coming down to breakfast, and Sister was right behind Swamiji. Suddenly, she got a little unsteady on those steep stairs, and she reached out in front of her using Swamiji's shoulder to brace herself. According to Sister, the whole world just went away. She was in another place, in another consciousness, and she never remembered getting down the rest of the steps. But somehow he got her into the dining room and seated her, and then he took over. And he was so charming, and so

8. Ibid p. 229

9. Brahmacharini Usha [Pravrajika Ananda-prana], 'Swamiji in Southern California', *Vedanta and the West*, No. 158, (Hollywood, California; Vedanta Press, 1962) p. 56

10. Burke, op cit p. 227

6. *Complete Works*, 2:1-2

7. Burke, op cit p. 232



entertaining, and so much fun that nobody noticed that Sister was all blanked out; that she was in another place. Just touching his shoulder had taken her there. From that moment on, Swamiji was God to Sister.

Vedanta teaches that when true karma yoga is performed, the mind is purified and faith and love come spontaneously to one's heart. Through selfless service to Swamiji, to whom she was now totally devoted, love for and faith in a spiritual ideal welled up in Sister's heart, and this ideal became the abiding anchor of her life. This was the beginning impulse which set Sister Lalita firmly on the spiritual path, and for the rest of her life she tried to nurture what she had received, thus establishing herself as a sincere seeker in spiritual life.

Raja yoga became so much a part of her life that even in her eighties in Hollywood she still went into the shrine three times a day for meditation. She would sit, sometimes for long periods, in a very in-drawn mood. But it was karma yoga that remained her main spiritual practice because she now had an ideal to love, hold on to, and work for, and her work became worship.

Shri Ramakrishna often said, 'The expert dancer never makes a false step.' So it is with the devotee who works out of love for an ideal. As a result, his skill tends to improve greatly. He works with great care, concentration, and detachment because all efforts are being dedicated to his ideal. Such a worker illustrates perfectly the dynamics of combining the yogas of bhakti, dhyana, karma, and jnana as described by Swami Vivekananda in 'The Ideal of a Universal Religion':

...The more I concentrate my love and powers, the better I shall be able to give expression to what I want to convey to you. The more this power of concentration, the more knowledge is acquired, because this is the one and only method of acquiring knowledge...In making money, or in worshipping God, or in doing anything, the

stronger the power of concentration, the better will that thing be done.<sup>11</sup>

In her later Hollywood years it was said of Sister Lalita by a friend:

Sister's integrity was so great. Every little thing was done right. She took care of the flowers at the Hollywood centre. She would go around in the garden and plant bits of things here and there and pretty soon they'd grow up and bloom so beautifully! Even in her eighties when she could no longer bend over, she kept right on digging and weeding and planting so there would always be flowers for offering. When she was cooking, the tiniest seed had to be removed from the grapefruit, and she didn't rush around and drop things like most people do. Sometimes we'd be running late to get food cooked for offering and we'd think it would never get done on time. Still Sister didn't rush, and still everything was done exactly on time, and it was good!

Swamiji had said in 'Hints on Practical Spirituality':

Live for an ideal, and leave no place in the mind for anything else, Let us put forth all our energies to acquire that which never fails—our spiritual perfection. If we have true yearning for realisation, we must struggle, and through struggle growth will come. We shall make mistakes, but they may be angels unawares.<sup>12</sup>

Sister's devotion and love for her ideal became the firm base of all her thoughts and actions in daily life. Holding on to that base, she performed her duties with great care, concentration, detachment, and joy.

Swami Vivekananda spent two months lecturing in southern California, then went north to San Francisco. When he left there to return to New York in June 1900, he promised the devotees: 'I have only talked, but I shall send you one of my brethren who will show you how to live what I have taught.'<sup>13</sup> This was Swami Turiyananda

11. *Complete Works* 2:391

12. *Ibid* p. 37

13. A Western Disciple [Br. Gurudasa, later Swami Atulananda], *With the Swamis in America* (Mayavati: Advaita Ashrama, 1938) p. 69

who arrived in southern California in July of 1900 and spent a few weeks in Pasadena as the guest of the Meads before going to San Francisco. Again in the early part of 1901 he spent some time in the Los Angeles area.

Few details are known about Swami Turiyananda's association with the Meads while in southern California, but it is believed that he initiated Sister and Helen and that it was he who gave Sister the name Lalita [a name of the Divine Mother implying gentleness, beauty and playfulness]. It is known that once he said to her, 'Sister, only live, and your silent life will be a great teaching.'

Though his period of stay with Sister was not long, it can be inferred that Swami Turiyananda, too, had a great impact on her character. One of his famous teachings was surely imprinted on her life like a hallmark:

Sincerity is the backbone of spirituality. One should practise it in one's actions and thoughts. There should be no disagreement between what one feels and what one says; and at the same time one should not be cruel or unkind when one adheres to truth. Make your heart and tongue one. But truthfulness and kindness must go together.<sup>14</sup>

As those who knew her have testified, Sister Lalita spoke only with gentleness, speaking only gentle truths. There are so many stories about how she would never deviate from the truth but would never express it harshly. It has been suggested that Sister never expressed the negative because she simply never saw the negative. Once, out of fun, some devotees in Hollywood tried to test Sister. They wanted to see if she would say something with a little 'bite' in it. One woman put on 'an atrocious hat' and when Sister did not react, other coaxed her a little, asking, 'How do you like that hat, Sister?' But Sister just

looked at the hat and said softly, 'That's beautiful ribbon on the band.'

Surely Sister Lalita's great devotion to truth also came from another experience with Swamiji who once took her by surprise, as she was cooking, by asking her: 'Were you happily married?' Hesitating for a revealing moment, she answered, 'Yes, Swamiji', to which he responded drily, 'I am glad that there was one happy marriage.'<sup>15</sup>

From late 1900 to 1925 Sister Lalita went about living her life, trying to hold on to truth as the swamis had taught her, spiritualizing her actions as much as possible, and cherishing the store of memories she now had of the holy association with two great disciples of Sri Ramakrishna. She strove sincerely to put into her life their teachings and to instil them in her son Ralph. Like mothers everywhere, she surely looked to her son as a symbol of hope—someone who could benefit from her gains and avoid her losses, and she was always grateful that he had been given the wonderful and unique experience of having contact with the two swamis. She often recalled that Swami Vivekananda had allowed Ralph to render personal service such as polishing his shoes and fetching his tobacco; that one day he had appeared to bless Ralph; and that he had talked to the young man about the Atman.<sup>16</sup> Ralph went through college, became a land engineer, and moved into a house in Hollywood with his mother. He never married.

It is said that sometimes God takes away the thing a person loves most in order to draw that person closer to Him. In 1925, when he was forty-two years old, Ralph was killed in a landslide. After that for three years Sister was desolate, living in a

14. Swami Ritajananda, *Swami Turiyananda* (Madras, Sri Ramakrishna Math, 1973) p. 70

15. Burke, op cit p. 232

16. Ibid Pp. 223-4



tangle of grief and shock. Then in 1928 she met Swami Prabhavananda of the Vedanta Society of Portland who was lecturing in California. An immediate feeling of kinship with this young swami sprang up in Sister's heart, drawing her to him and his work. Within a year she offered to help him establish a Society in Hollywood by giving him her house and some money for building a temple on adjacent ground.

In 'Christ the Messenger', Swami Vivekananda had told his audience:

When a man has no more self in him, no possession, nothing to call 'me' or 'mine', has given himself up entirely, destroyed himself as it were—in that man is God Himself; for in him self-will is gone, crushed out, annihilated. That is the ideal man.<sup>17</sup>

Swami Prabhavananda's acceptance of Sister Lalita's generous gifts marked the beginning of the Vedanta Society of Southern California, and her giving of this legacy, which represented all she had in the world, marked the beginning of her total self-surrender to God. As such, it was one of the most important milestones in her spiritual life. No more did she have any desire for acquiring temporal things of the world, so she no longer had any material possessions to offer, but she would henceforth offer all her actions and love in the form of service to His devotees. With this kind of dispassion, Sister Lalita was now completely free to direct all actions and thoughts to God in one form or another.

At first the Vedanta Society of Southern California was a self-contained unit all held together in the one little house which is now a bookshop and offices.<sup>18</sup> Sister,

17. *Complete Works* (1978), 4:150

18. Facts pertaining to the Vedanta Society of Southern California from 1929 to 1949 are taken from *Vedanta in Southern California*, (Hollywood, California: Vedanta Press, 1960), Pp. 39-41 and Swami Chetanananda, op cit.

who was then about seventy years old, did the cooking, cleaning and gardening, and Swami Prabhavananda handled maintenance and ministry. Life was simple. Many days it was so simple that they had only popcorn and milk for meals.

For a time the Swami gave advertised, public lectures in halls, but he found that many of those who attended had come with great expectations of acquiring powers. Lectures were then limited to the living room of the house which was called the Vivekananda Home, and no advertising was done. Though the audience often consisted of only three people, full lectures were always given. 'You know, I never was discouraged,' the Swami later stated. 'When I saw few people in the audience, I just spoke with more enthusiasm.' In later years he also recalled that during this lean period he spent much time translating Hindu scriptures into readable and enjoyable English.

Gradually a small but earnest nucleus of devotees began to form. Two rooms were added on to the house and one of this became a shrine room where Sister now did a daily five-item *puja*. This growth drew a little notice and attracted more people. Activities were expanded and funds became more adequate. In 1938 the money which Sister had donated was used to build a sparkling white Hindu temple next to the Vivekananda Home. With the joining of several monastics in the early 1940s the compound grew to include the Brahmananda Cottage, a neighbouring bungalow for male residents. With the publication in 1944 of the acclaimed, poetic translation by Swami Prabhavananda and Christopher Isherwood of *The Bhagavad Gita*, more people were drawn to the beautiful teachings of Vedanta, and now growth came more rapidly. By 1949 two large endowments of land had been made and the Society included not only the

Hollywood centre but a convent in Santa Barbara and a monastery in Trabuco Canyon. The Vedanta Society of Southern California was now one of the largest centres in the Western World.

Throughout it all, Sister remained Sister. Though it was her house and legacy that had helped to establish this fast-growing Society, she did not see herself as deserving any special recognition or privilege. In fact, many who came to the centre during the years she lived there did not even know about her. Said one of the nuns:

Sister was a quiet, saintly person. People would come to the centre and never even know she was there because she was so quiet and didn't project herself. And she was so humble with Swami Prabhavananda. One time he established a rule that any of the monastics wanting to leave the compound had to ask his permission first. Sister went to him one day and asked if she could go out on an errand. He told her, 'Sister, you don't have to ask my permission', but she said, 'Swami, I'd like to ask permission if the others have to.'

It is also said about her humility that even with a much younger person, she would stand aside at a doorway so that person could pass through first.<sup>19</sup>

According to the teachings of Vedanta, humility, desirelessness, and contentment are the signs that indicate that one's mind is becoming more and more pure. Sister would never ask for anything. Even when her few possessions became unusable, she never asked for replacements. Those who attended on her had to decide themselves what personal items needed to be purchased for her and when. And though she became almost deaf in later years, she never complained about not being able to take part in conversations. She had given up everything for the Vedanta work. She was happy to serve others; she expected nothing in return. She had no desires; no fears.

She was just content to remain inside with the Self; to be still and know the truth which she had learned from the swamis.

It is said that even when Sister was very elderly, she still recalled the serious way in which Swami Vivekananda had instructed her about the Self, saying to her with great emphasis that she was omnipresent, omnipotent, and omniscient, thus reminding her that the Atman is the only reality.<sup>20</sup> During her long moments of silence, she might have been remembering some other personal instruction he had given by way of reinforcing for her the teachings from his lectures. Perhaps she could still hear his voice saying to her: 'Listen, Madam, when your hands work, the mind should repeat, "I am It, I am It". Think of it, dream of it, until it becomes bone of your bones and flesh of your flesh, until all the hideous dreams of littleness, of weakness, of misery, and of evil, have entirely vanished, and no more then can the Truth be hidden from you even for a moment.'<sup>21</sup>

In 1936 Swami Prabhavananda took Sister Lalita to India for a visit. On one occasion they were travelling from Vishnupur to Kamarpukur with Swami Vijnanananda, another direct disciple of Sri Ramakrishna. Circumstances forced Sister and Swami Vijnanananda to ride for several hours in the back of a car. The swami, having been accustomed previously to talkative Westerners, commented that evening: 'Sister Lalita is really a rare lady. During our journey...she sat by my side for many hours, but did not speak a word. How quiet!'<sup>22</sup>

20. Brahmacharini Usha [Pravrajika Ananda-prana], op cit p. 56

21. *Complete Works*, 2:405

22. Swami Prabhavananda, 'Swami Vijnanananda: Reminiscences', *Prabuddha Bhadata* (Calcutta: Advaita Ashrama, August, 1976), p. 333

19. *Vedanta in Southern California*, p. 47



Another incident reveals the extent of her faith and trust in Swami Prabhavananda. Her hearing problem had become worse, and one evening at the Hollywood centre Swami introduced to her a married couple who were visiting, 'This man is a dancer from New York.' Sister, in her most gracious and warm manner, responded, 'Oh, a gangster from New York. Welcome!'

It is said about Sister by her friends in Hollywood that although she had such sterling qualities herself, she did not, by contrast, make others feel that they were less advanced in spiritual life. 'She was so good', said one, 'but she didn't make you feel like a heel. She always made you feel like you were a better person because she saw you that way—at your highest potential.'

It was also experienced by her friends that one could never get cross with her. Because she was unattached to her own actions, those who were with her were also inspired to be unattached. About her own mistakes, she used to simply say, 'Well, I needn't do *that* again.' It follows naturally that Sister Lalita, by her sattvic presence, had a great influence on others. 'Sister was so quiet', said one. 'She never said anything and I always felt in her presence something quite wonderful.' And another remembers that 'Sister radiated love and compassion'.

She could also verbally smooth things over when there were minor problems. According to one friend:

When tension and stress caused problems at the centre, it was Sister who would try to make peace. And she'd find reasons why the tension and stress were there. She'd say, 'Just relax. Don't hurry. Don't rush. Five minutes one way or the other won't make a difference.'

Swami Vivekananda taught that religion is realization. Sister Lalita's very presence and personality expressed her religion, and the peaceful, dependable rhythm of her life was a soothing balm to those around her. Because of her one-pointed love and

devotion for her ideal, she had no desires; because she was desireless, she was content and detached and carried peace wherever she went. By her gentleness, she inspired gentleness; by her love, she inspired love. Sister Lalita's transformation had come from love and it was sustained through love.

For Swami Vivekananda's birthday *pūjā* at the Vedanta Society of Southern California, Sister would perform worship by traditionally making a particular breakfast to serve him. Each year she followed the same menu that she had used in Pasadena many years before: orange juice, two fried eggs, two pieces of toast with marmalade, two cups of coffee, and a cigarette. Some devotees have remarked about the beauty of her silent service to Swamiji, saying:

I saw her do it several times and it was exquisite. She was always there in front of the shrine offering the tray, and it was one of those sights you can never forget. The mood and the devotion were beautiful. Sister was a very rare soul.

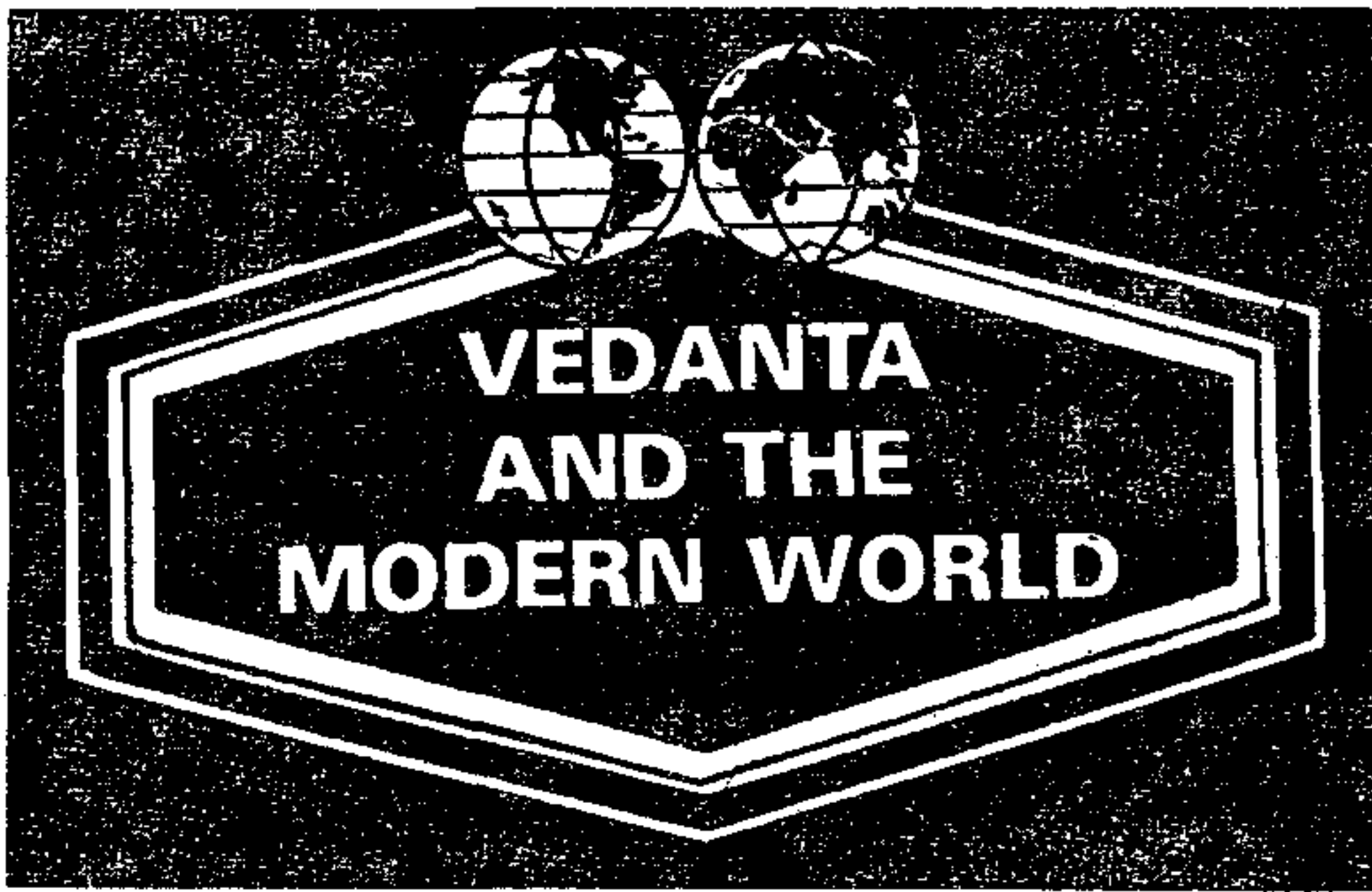
When she served the breakfast, there was a wonderful atmosphere in the shrine. One could feel the great devotion behind her actions. As far as she was concerned, Swamiji was really there.

She didn't serve the breakfast as a ritual. She served Swamiji. He was there. Others felt it too.

One year Swami Prabhavananda was ill and could not attend the *puja*. Afterwards, Sister came to him and said, 'Swami, *they were all there.*'

Sister was ninety years old when she died on July 23, 1949 at the Santa Barbara convent. It is said that toward the end of her life she would remain prostrate for a long time when saluting the Lord in the shrine. When Swami Prabhavananda once asked her about this practice, she explained apologetically, 'It takes me so long until I

(Continued on page 38)



## INTUITION—THE COMMON BASIS OF SCIENCE AND VEDANTA

SWAMI JITATMANANDA

### 1. *Vivekananda speaks in the language of physics*

The inevitable confluence of modern physics and Vedantic metaphysics was one of the truths which Swami Vivekananda repeatedly pointed out during the period of his preaching Vedanta in the West and the East right from 1893 to the end of 1900. Nikola Tesla, the famous U.S. electrical engineer and inventor was deeply impressed by Vivekananda's exposition of the oneness of matter or *ākāśa* and energy or *prāṇa* in his lectures on Raja Yoga delivered in New York in 1896.

Today after more than eighty years writers on modern physics are finding in Vivekananda's explanation of ancient Vedanta a close resemblance to the language of today's physics. Amaury de Reincoirt in his recent book on modern physics entitled, *The Eye of Shiva*, finds that in Vivekananda's interpretation 'Indian mysticism has evolved...as the science of physics itself.' And this, he states, 'points towards an inevitable convergence of the two.'<sup>1</sup>

Michael Talbot in his book entitled, *Mysticism and New Physics*, compares the space-time concepts of Vivekananda with

those of the father of space-time continuum idea, Herman Minkowski. After quoting Vivekananda's idea of space-time Talbot writes,

The remark was originally made by mystic S. Vivekananda in Jñāna Yoga, but the fact that the names of the mathematician who first theorized that space and time are a continuum, Herman Minkowski, and the greatest of the historical Brahmin sages, Advaita, are interchangeable, demonstrates once again the confluence of mysticism and the new physics.<sup>2</sup>

It seems obvious that the author mistakes the term 'Advaita' for the name of a person. But the similarity between the ideas of Vivekananda and those of Minkowski strikes him deeply, and Talbot continues,

Vivekananda further expresses a view that has become the backbone of quantum theory. There is no such thing as strict causality.<sup>3</sup>

Vivekananda's ideas are proving prophetically true. Modern physics which began on the foundations of positivism or experimental verification of external objects is moving towards an intuitive understanding of the real nature of things. Material reality today appears not only beyond the capacity of senses but even beyond the capacity of ordinary human imagination.

1. Amaury de Reincoirt, *The Eye of Shiva* (New York: William Morrow & Co. 1981) p. 190

2. Michael Talbot, *Mysticism and New Physics* (New York: Bantam Books, 1980) p. 114

3. op cit p. 115



The dematerialization of matter leads naturally towards a convergence of modern physics and Vedanta philosophy.

Vivekananda himself predicted that western science which seeks to control everything by controlling the external reality will one day realize that the control of external reality is inextricably connected with the control of internal nature:

Some say that by controlling internal nature we control everything. Others that by controlling external nature we control everything. Carried to the extreme both are right, because in nature there is no such division as internal or external. These are fictitious limitations that never existed. The externalities and the internalities are destined to meet at the same point, when both reach the extreme of their knowledge. Just as a physicist, when he pushes his knowledge to its limits, finds it melting away into metaphysics, so a metaphysician will find that what he calls mind and matter are but apparent distinctions, the reality being One.<sup>4</sup>

The search for the real nature of things through an investigation into external physical nature—this was the traditional Graeco-Roman or the western method of knowledge. The eastern or the Indian method was to search after reality through an investigation into the internal nature of man, which Vivekananda described as 'that introspective search after divinity' which left its 'peculiar stamp' upon the whole cycle of Upanishadic or Vedantic philosophy. In the western tradition saints have been painted as looking upward to the skies for God while in the eastern tradition a *ṛṣi* or a yogi is painted with his eyes closed. He is searching for the ultimate reality beyond the sensory levels of existence. His meditation is supersensory and therefore essentially transcendental in nature. As the *Kaṭha Upaniṣad* succinctly puts it, 'The wise man desiring immortality

turns his gaze inward and realizes the indwelling Self.'<sup>5</sup>

The uniqueness of Vivekananda lies in the significant fact that he is the only one in modern times who accepted both the external and internal ways of investigation as equally valid means to the realization of the ultimate reality. He not only saw no contradiction between them but found them complementary. He was the first great modern thinker to point out the common experiential ground between Vedanta and science. In his lecture on the Methods and Purpose of Religion, he clarifies this point with a rare conviction and authority:

I do not mean that those who want to search after truth through external nature are wrong, nor that those who want to search after truth through internal nature are higher. These are the two modes of procedure. Both of them must live; both of them must be studied; and in the end we shall find that they meet. We shall see that neither is the body antagonistic to the mind, nor the mind to the body, although we find many persons who think that this body is nothing. In old times, every country was full of people who thought this body was only a disease, a sin, or something of that kind. Later on, however, we see how, as it was taught in the Vedas, this body melts into the mind and the mind into the body.<sup>6</sup>

## 2. *Positivism ends in intuitionism*

Positivism is the philosophy which refuses to accept any thing which is not verifiable by senses or experiments. It rejects all metaphysical speculations as unnecessary. August Comte and d'Alembert formed the powerful vanguard of positivism in the West in the 18th century.

5. कश्चिद्धीरः प्रत्यगात्मानमैक्षदावृत्त-

चक्षरमृतत्वमिच्छन्

*Kaṭha Upaniṣad* 2.1.1

6. *Complete Works* 6 (1978): 4

4. *The Complete Works of Swami Vivekananda* (Calcutta: Advaita Ashrama, 1977) 1:131 (henceforward cited as *Complete Works*)

Positivism soon came to be associated with empiricism, a school of thought which holds that sense-experience is the only source of knowledge.

Einstein began his life as a positivist. In his early years at Zurich, Einstein fell under the intellectual influence of the Austrian physicist-philosopher Ernst Mach, a major advocate of positivism in physics. Mach taught that, "Theoretical physicists should never use any idea in physics which cannot be given a precise, direct meaning through experimental operations. Ideas without connection to the empirical world were deemed superfluous to physical theory."<sup>7</sup> As a forerunner of logical positivism Mach said, "Science may be regarded as a minimal problem consisting of the completest presentation of facts with the least possible expenditure of thought."<sup>8</sup> Einstein explicitly acknowledged his intellectual debt to Mach.<sup>9</sup> During his early years Einstein thought that physics should deal with those things only which are verifiable by senses. That is why he defined Space as that which could be measured with rods. That is why he defined time as that which could be measured with a clock. That is why he rejected the age-old belief in 'ether' as the absolute frame of reference when despite repeated experiments Michelson-Morley's interferometer failed to detect its presence.

Whether physics should be based on positivism and should deal only with things which are verifiable by experiments became a controversial question after Heisenberg's discovery that the very fact of observation alters the nature of observation or

the result of experiment. Physicists who held to positivism began to argue against the 'microphysical indeterminacy' of Heisenberg. Karl R. Popper wittily observed that Heisenberg himself 'tries to give a causal explanation why causal explanations are impossible.'<sup>10</sup> Alfred North Whitehead criticized Heisenberg's indeterminacy principle and the 'tendency to give an extreme subjective interpretation to this new doctrine' by young physicists like Schrodinger, Wigner, Wheeler and others. Whitehead said, 'But it is the observer's body that we want, and not his mind...on the whole, it is better to concentrate attention on Michelson's interferometer and to leave Michelson's body and Michelson's mind out of picture.'<sup>11</sup>

The sheer weight of the new discoveries in physics and also the recognition of intuition in his own self, gradually forced Einstein to move away from positivism. Probably Planck influenced him in this transition. In a letter to his philosopher friend, Maurice Solovine, he described with a diagram what is known as 'Einstein's postulation method'.<sup>12</sup> By an 'intuitive leap' he sought to fly from sensory experience and set up an 'absolute postulate' in the first place. This 'absolute postulate' is a creation of pure intuition. It is never derived from experience or experiments. That is why he wrote, 'For the creation of a theory, the mere collection of recorded phenomena never suffices—there must always be added a free invention of the human mind that attacks the heart of the matter.'<sup>13</sup>

Heisenberg, to whom positivism was the 'greatest philosophical opponent', rejected it at the very outset. 'Positivism makes the mistake of refusing', writes Heisenberg,

7. Cf Heinz R. Pagels, *The Cosmic Code* (New York: Bantam Books, 1983) p. 39-40

8. Quoted in Edward O. Wilson *On Human Nature* (Harvard Univ. Press, 1978) p. 12

9. Cf Milic Capek, *Philosophical Implications of Contemporary Physics* (Princeton: D. Van Nostrand Co. 1961) p. 297

10. Ibid

11. Ibid, p. 304

12. Cf *The Cosmic Code*, p. 40

13. Ibid, p. 41



'to see the overall connection and of wanting to deliberately keep them in the dark.'<sup>14</sup> Vivekananda foresaw the inevitable frustration of a science which has for its foundation nothing but sensory experiences. He said, 'The senses cheat you day and night. Vedanta found that ages ago; modern science is just discovering the same fact.'<sup>15</sup> This Vivekananda said in 1895 to the westerners.

Both theoretical and experimental physicists today are gradually turning towards the abstract and the intuitive. Mathematics is becoming the main tool of physics, and mathematics is the language of the abstract. In fact, modern physics is turning more and more 'crazy' and less and less experimentally verifiable. Heinz Pagels tells us of a remarkable occasion when Wolfgang Pauli went to deliver a lecture on Heisenberg's theory at the Puplin laboratory in Columbia University. When the lecture was over Niels Bohr, who was one among the audience, shouted out to Pauli that the theory could not be right because 'It is not crazy enough.' Pauli at once answered with the same humour, 'It is crazy enough.' Both were outstanding physicists of this century and both 'knew that the craziness of the quantum theory turns out to be right.' 'Theoretical physicists', writes Pagels, 'swim in a sea of ideas.'<sup>16</sup>

By the 1950s, especially after the Everette-Wheeler interpretation of quantum theory of 1957 which is also known as the Many-Worlds Interpretation, mind or consciousness began to gain more importance than the machine in the physicists' conception of the universe. While Heisenberg asserted that the outcome of any

microphysical experiment is linked with the mind of the scientist, Eugene Wigner, Nobel physicist in 1961, went a step further and asserted that 'it is impossible to give description of quantum mechanical principle without explicit reference to consciousness.'<sup>17</sup>

Primarily a theoretical physicist, Einstein found in the language of mathematics the vehicle of grasping the reality which is supersensory. Physics today is bound to transcend, as Einstein thought, 'the rattle of the senses'.<sup>18</sup> Einstein said, 'But the creative principle resides in mathematics. In a certain sense, therefore, I hold it true that pure thought can grasp reality as the ancients dreamed'.<sup>19</sup>

With the help of this power of 'pure thought' or 'intuitive leap' Einstein made strange postulates such as about the equivalence of gravity and acceleration, the principle of invariance, time-dilation, space-contraction, deflection of light by the gravitational field, etc. Most of these postulates later on got experimentally verified. Though he began as a positivist, Einstein became one of the most outstanding intuitive minds in human history. 'If Einstein had remained a positivist, I doubt that he would have discovered general relativity', writes Heinz R. Pagels.<sup>20</sup>

The Japanese Nobel physicist Hideki Yukawa intuitively predicted the existence of an unknown subatomic particle to account for the super-binding strength of the strong-interaction force which holds the nucleus together. After twelve years of research the particle predicted was discovered in 1947 and it was called pi-meson or pion. Yukawa had been brought up in the oriental tradition which taught

14. Armin Hermann, *Heisenberg* (Reinbek bei Hamburg: Rowohlt Taschenbuch Verlag GmbH. 1976) p. 108

15. *Complete Works*, 7 (1972): 74

16. *The Cosmic Code*, p. 304

17. *Mysticism and New Physics*, p. 34

18. Lincoln Barnett, *The Universe and Dr. Einstein* (London: Comet Books/Collins. 1956) p. 118

19. Quoted in *The Cosmic Code*, p. 24

20. *Ibid*, p. 40

him the superiority of intuition over logic and experiments. In his book on *Creativity and Intuition* Yukawa writes,

A thorough-going rationalism eludes them (the oriental and the Chinese)... in particular, the development of physics since the beginning of twentieth century has taken this kind of course. In this kind of course nothing can be done by logic alone. The only course is to perceive the whole intuitively and see through what is correct...the fact remains that in order to synthesize contradictions it is necessary first to survey the whole with intuition.

And again he writes,

In short by supplementing what he (the scientist) already has with his imagination, he produces an integral whole. If he succeeds in the attempt, the contradictions will be resolved...for us the scientists, the power of imagination is as important ingredient.<sup>21</sup>

The ancient seers of India evolved a number of concepts on space, time, causality, matter, energy, the origin of our universe, and the limitations of reason, which are in striking conformity with the ideas of modern physicists. How did they do this? Certainly not through telescopes or electron microscopes. Their only technique was meditation, which opened the door to higher intuition or pure imagination that transcends reason but never contradicts it. Swami Vivekananda said, 'Imagination will lead you to the highest even more rapidly and easily than reasoning.'<sup>22</sup> He never stood against reason; but pointed out that intuition is the natural culmination of reason. This is the basic methodology of Vedanta. Swamiji explains it as follows:

Religion is above reason, supernatural. Faith is not belief, it is the grasp on the ultimate, an illumination...Stick to your reason until you reach something higher; and you will know it to be higher, because it will not jar with reason. ...All religion is going beyond reason, but reason is the only guide to get there. Instinct is

<sup>21</sup>. Hideki Yukawa, *Creativity and Intuition* (Tokyo, New York, San Francisco: Kodansha International) p. 57-58

<sup>22</sup>. *Complete Works*, 7:100

like ice, reason is the water, and inspiration is the subtlest form of vapour, one follows the other.<sup>23</sup>

### 3. *Indeterminacy and the Atman=Brahman equation*

It was Einstein who deeply impressed young Heisenberg with the radical idea that the 'experiment-observation-inference' method was 'nonsense'. Einstein said, 'It is the theory which decides what can be observed'.<sup>24</sup> But when Heisenberg built up the 'uncertainty principle' on the Einsteinian idea, Einstein refused to accept it until the end of his life. He intensely believed unto the end in the existence of a strictly deterministic order in the running of the universe.

While Einstein refused to accept indeterminacy, another Nobel physicist, Erwin Schrodinger, took it up to build a bridge to some of the logical conclusions of Vedanta philosophy. Schrodinger goes deeper and rejects, contrary to most western scientists, the idea that '*Quantum indeterminacy* plays no biologically relevant role in them.'<sup>25</sup> Almost in the style of a Vedantic philosopher he shows how unreasonable it would be for a scientist to reject Heisenberg's indeterminacy. After pointing out that no scientist can find satisfaction in 'declaring himself to be a pure mechanism',<sup>26</sup> Schrodinger examines two propositions based on common experience: (i) My body functions as a pure mechanism according to the laws of Nature. (ii) Yet I know, by incontrovertible direct experience that I am directing its motion of which I foresee the effects, that may be fateful and all-important, in which

<sup>23</sup>. Ibid, p. 60

<sup>24</sup>. Quoted in *The American Review* (Summer 1974) p. 52

<sup>25</sup>. Erwin Schrodinger *Mind and Matter* (Cambridge University Press. 1967) p. 92

<sup>26</sup>. Ibid



case I feel and take full responsibilities for them.<sup>27</sup> While in the waking state still we seem to determine our acts, in sleep or unconscious state human body functions although no voluntary will is exerted for its functioning. Schrodinger's inference on these two questions shows the transformation of a physicist into a philosopher. 'The only possible inference' he says, 'from these two facts is, I think, that I (I in the widest meaning of the word, that is, to say, every conscious mind that has ever said or felt 'I') am the person, if any, who controls the 'motion of atoms' according to the laws of Nature.'<sup>28</sup>

The only support to this inference he finds in the ancient Upanishads of India. Boldly upholding this Upanishadic or the Vedantic philosophy before the western scientists, Schrodinger says:

From the early great Upanisads the recognition ATMAN=BRAHMAN (the personal Self called the omnipresent, all-comprehending eternal Self) was in Indian thoughts considered far from being blasphemous to represent the quintessence of deepest insight into the happenings of the world. The striving of all scholars of Vedanta was, after having learnt to pronounce with their lips, really to assimilate in their minds this grandest of all thoughts.<sup>29</sup>

#### 4. *The mysterious universe*

From the early 1920s quantum physics began to impress the world with an increasing number of successes. Under its influence the theory of chemical bond was discovered. It also developed the theories of solid-state matter, metals, electrical conductivity and magnetism. Nuclear physics began. Particle physics developed. But Einstein stood stubbornly apart from quantum physics. Physicist Paul Ehrenfast

said, 'We have lost our leader.'<sup>30</sup> From 1927 onwards Einstein lived working on his unified field theory without any visible success and turned his attention not 'within the atoms, but outward to the stars, and beyond them to the vast drowned depths of empty space and time,'<sup>31</sup> as Lincoln Barnett said.

However, even without quantum mechanics, the very immensity of and the startling discoveries of astrophysics compelled many physicists of this century to shift to an idealistic view of the universe. Eminent scientists like Arthur Eddington and James Jeans came forward to popularize this view among the common people who until the beginning of the 20th century had only a limited view of our universe. Jeans indicated that the probable number of stars in the universe could be something like the total number of grains of sand on all the sea-shores of the world. And our Sun, a second rate star, 'is a million times as big as the earth and 300,000 times as massive.'<sup>32</sup>

Astronomer Edwin Hubble of the Mount Wilson Observatory studied sample areas of space in the outer skies over a period of years and came to the conclusion that one gramme of matter per cubic centimetre of space is .00000 00000 00000-00000 00000 00001 gramme of matter per cubic centimetre of space.<sup>33</sup> Applied to Einstein's field equation, this figure confirms that space is curved and that the radius of this universe is 35 billion light years or 21, 00000, 00000, 00000, 00000, 00 miles. A sunbeam moving with the speed of 186,000 miles per second will take 200 billion terrestrial years to complete the

27. Ibid, Pp. 92-93

28. Ibid, p. 93

29. Ibid

30. *The Cosmic Code*, p. 43

31. *The Universe and Dr. Einstein*, p. 35

32. C.E.M. Joad, *Philosophical Aspects of Modern Science* (London: Unwin Books, 1963) p. 42

33. *The Universe and Dr. Einstein*, Pp. 101-2

cosmic circle.<sup>34</sup> Standing in reverence and awe at a tiniest corner of this universe Einstein, the erstwhile positivist admitted,

The most beautiful and most profound emotion we can experience is the sensation of the mystical. It is the sower of all science...To know that what is impenetrable to us really exists, manifesting itself as the lightest wisdom and the most radiant beauty which our dull faculties can comprehend only in their most primitive forms—this knowledge this feeling is at the centre of true religiousness.

That deeply emotional conviction of the presence of a superior reasoning power which is revealed in the incomprehensible universe, form my idea of God<sup>35</sup>

Physicist John Wheeler tells us that the universe we know is '13 billion years old, 26 billion light years across, filled with galaxies that too are now estimated in billions—is but one of who knows how many likely trajectories of universes across a gigantic platform of super-space whose dimension are not three or four but infinite.'<sup>36</sup> Astrophysicist Fred Hoyle writes in his book *The Nature of the Universe* 'No literary imagination could have invented a story one hundred part as fantastic as the sombre facts that have been unearthed'.

Today the exploration of the mysteries of this immensely complex universe, both in the microcosm and the macrocosm, has become almost a spiritual passion with the physicists. Steven Weinberg, Nobel Physicist in 1979, expressed this very idea which may be interchanged with the language of mystics, or of tragedians like Sophocles or Shakespeare. 'The effort to understand the universe is one of the few things that lifts

human life a little above the farce, and gives it some of the grace of tragedy.'<sup>37</sup>

In its latest forms Physics today is turning into a spiritual quest consuming the entire devotion of the scientist who finds in this pursuit of pure knowledge the justification of human life. The feeling of awe and reverence in the presence of the unexplainable mystery of life and the indomitable tenacity of human aspiration towards perfection despite all failures in life—it is this contradiction that imparts a tragic sense to human existence. This tragic sense finds its most sublime expression in the speculations of some of the eminent modern physicists.

Vivekananda exposes this tragic dichotomy between the inescapable limitations of our intellects and the indomitable desire for knowledge in man, who has been struggling to explore a mysterious universe since the dawn of civilization, in the following words:

So with our intellect. In our desire to solve the mysteries of the universe, we cannot stop our questioning, we feel we must know and cannot believe that no knowledge is to be gained. A few steps and there arises the wall of beginningless and endless time which we cannot surmount. A few steps, and there appears a wall of boundless space which cannot be surmounted, and the whole is irrevocably bound by the walls of cause and effects. We cannot go beyond them. Yet we struggle, and still have to struggle. And this is Maya.<sup>38</sup>

##### 5. *The idealistic view of the universe*

The immensity of the Universe inspired Jeans to write 'The Universe can be pictured, although still very imperfectly and inadequately, as consisting of pure thought, the thought of what, for want of a wider word, we must describe of a Mathematical Thinker.' The concept of

34. Ibid

35. Ibid, p. 113

36. Cited in Huston Smith, *The Forgotten Truth* (New York: Harper Colophone Books 1976) p. 102

37. Quoted in *The Cosmic Code*, p. 278

38. *Complete Works* 2 (1976): 119



the universe as a product of pure thought has a striking resemblance to the Upanisadic view of the ultimate reality as a great Poet who conceives this universe in thought and creates it. The Mīmāṃsakas, who developed the philosophy of Vedic exegesis, held that behind every phenomena in nature was the word and behind every word was the idea. Thought is always earlier to word, the 'word' which as the Gospel of St. John says, was with 'God' and the word was God. Vivekananda says,

The universe is thought, and the Vedas are the words of this thought. We can create and uncreate this whole universe. Repeating the words, the unseen thought is aroused, and as a result a seen effect is produced. This is the claim of a certain sect of Karmis. They think that each one of us is a creator. Pronounce the words, the thought which corresponds will arise, and the result will become visible. 'Thought is the power of the word, the word is the expression of the thought,' say Mīmāṃsakas, a Hindu philosophical sect.<sup>39</sup>

Wherever name is, there is form and thought. It naturally follows that if the universe is built upon the same plan as the body, the universe also must have the same divisions of form, name, and thought. The 'thought' is the finest part of the universe, the real motive power. The thought behind our body is called soul, and the thought behind the universe is called God.<sup>40</sup>

The philosophical outcome of Jeans' idea of the 'Mysterious universe' is unmistakable. It is, writes Joad,

as if having invented a game for ourselves, and laid down its rules, we suddenly discover that the outside obeyed the very rules which we had invented...That the universe bears witness to the workings of a mind that has kinship with our own.<sup>41</sup>

'Religion is the science which learns the transcendental in nature through the

transcendental in man,' says Vivekananda. 'We know as yet but little of man, consequently but little of the universe.'<sup>42</sup> Man the microcosm, says Vedanta, preserves within him in a coiled form all the knowledge of the macrocosm, the infinitely vast cosmic universe outside.

Jeans also speculates that this four dimensional (space-time) universe in all probability contain more dimensions which are not perceptible to our senses. He compares scientists to the 'blind worms' which know only the two-dimensional surface of the earth, and are unconscious of the other two dimensions. Jeans also suggests, the four-dimensional space-time continuum which mathematical physics studies may be merely a phenomenal projection of a reality which occupies more than four dimensions; this reality is identified with God's mind.<sup>43</sup>

This suggestions of Jeans is one of the basic principles of Vedantic epistemology. Vedanta believes that in altered states of consciousness we become aware of a 'separate reality' as Carlos Castaneda calls it in his book of the same title. '...the whole universe is but one,' says Vivekananda, '...which through the senses we see as matter, through the intellect as souls; and through the spirit as God.'<sup>44</sup>

While positivism believes only in the sensory verification of matter, Idealism speculates on the reality of the ideas behind matter. In the latter part of his life Heisenberg was deeply influenced by Platonic Idealism. He wrote, 'The elementary particles can be compared with regular bodies in Plato's *Timaeus*. The original models determined all subsequent developments. It is these ideas that help

39. Ibid 7:48

40. Ibid 4 (1978): 49

41. *Philosophical Aspects of Modern Science* p. 48

42. *Complete Works* 8 (1977): 20-21

43. Cited in *Philosophical Aspects of Modern Science* p. 46

44. *Complete Works* 2: 252-53

us to create our concept of matter.<sup>45</sup> In the light of quantum physics 'we create', writes M. Talbot 'for ourselves a word-built world. We lock ourselves into the world to the extent that our thinking proceeds to become dependent upon semantics. But we should not confuse our word-built reality with what is actually out there'.<sup>46</sup>

Vivekananda clarifies this idealistic view of the universe as something in the Hindu way of thinking. He says, 'When the Hindus would express, "I saw a thing", they say, "I saw a word-meaning (*padartha*)". Even this universe is a "word-meaning".<sup>47</sup> In Sanskrit *pada* means word and *artha* means meaning. Hindus call any phenomenal reality as *padartha*.

To his western disciple Sister Nivedita, Vivekananda said, 'Orthodox Hinduism makes *śruti*, the sound, everything. The thing is but a feeble manifestation of the pre-existing and eternal idea.'<sup>48</sup> Sister Nivedita found in the above mentioned words of her master a more rational exposition of Plato's idealism. She writes, 'Thus the Greek philosophy of Plato is included within the Hindu philosophy of the Mīmāṃsakas, and a doctrine (of platonic idealism) that sounds merely empiric on the lips of Europe, finds reason and necessity, on those of India.'<sup>49</sup> Nivedita wrote this in the first decade of this century, long before Heisenberg declared in his celebrated World Science Congress speech, delivered at Washington on the 500th birth anniversary of Copernicus in 1973, that physicists will have to turn to Plato's ideas for explaining physical reality.

45. Heisenberg p. 122

46. *Mysticism and New Physics* p. 8

47. *Complete Works* 7:82

48. *The Complete Works of Sister Nivedita* (Calcutta: Sister Nivedita Girls School. 1967) 1: 146

49. *Ibid*

## 6. Unity—the goal of physics and Vedanta

Heisenberg's teacher Sommerfeld wrote to Einstein, 'I can only promote quantum techniques. You must promote the philosophy.'<sup>50</sup> Yet Einstein did not formulate any philosophy of physics as such, although there is a lot of philosophical stuff in what was written and spoken in later years by his great intuitive mind. But physics today is relating itself increasingly to philosophy and drawing closer to Vedanta philosophy. Heisenberg himself hinted at this connection: 'The great scientific contribution in theoretical physics that has come from Japan since the last war may be an indication of a certain tradition of the Far-East and the philosophical substance of quantum theory.'<sup>51</sup>

Metaphysical questions are increasingly drawing the attention of the leading theoretical physicists of 1890. In an article on a recent interview with the celebrated black hole physicist Stephen Hawking of Cambridge, the writer Michael Harwood states:

The theoretical physicist, although he deals in such arcane, modern concepts as curved time and space, is part of a philosophical and spiritual tradition older than recorded history. He seeks to know not just life as he experiences it but how the hidden parts of the universe work and fit together.

That isolates the theoretical physicist from the intellectual mainstream, yet the rewards may be cosmic in scope, for the physicist seeks grand answers that will effect the lives of everyone—on spiritual and practical—levels for ever after.<sup>52</sup>

In another recent interview with physicist John Wheeler whose concept of 'Superspace' and 'Many-worlds interpretation' of quantum theory have considerably

50. Heisenberg p. 18

51. Fritjof Capra, *The Tao of Physics* (Berkeley: Shambhala Publication. 1975) p. 18

52. *The New York Times Magazine*, 23rd June, 1983. p. 16



influenced the world of modern physics for the last thirty years, the writer Timothy Ferris mentions how Wheeler was dreaming of a drastic simplification about our knowledge of the universe. Sitting in his room and watching the river turning gold with rays of sunset, Wheeler said quietly,

We find the world strange, but what's strange is us. It seems to me that we don't yet read the message properly, but in time to come, we will see it in some single, simple sentence. As we say that sentence to each other we'll say, 'Oh, how beautiful.' How could we have missed it, all that time?<sup>53</sup>

Vivekananda predicted that modern science would touch its final destination as soon as it reached 'Unity'—that is, the knowledge that the microcosm contains in it the entire potentialities of the macrocosm. Wheeler's dream of a single, simple sentence explaining the strange universe reminds us of the simple but profoundly powerful lines like, *tat twam asi* (Thou art That) or *aham brahmasmi* (I am Brahman or Existence-Knowledge-Bliss Absolute). Both the sentences contain the cardinal principle of Vedanta—the microcosm contains the macrocosm.

Timothy Ferris writes, 'Physicists seeking a unified theory of nature's forces are finding that the history and the fate of the universe is written in every atom.'<sup>54</sup>

We are here listening to an echo of what Vivekananda told his western audience more than eighty years ago:

Though an atom is invisible, unthinkable, yet in it are the whole power and potency of the universe. That is exactly what the Vedantist says of Atman.<sup>55</sup>

The world is homogeneous, and modern science shows beyond doubt that each atom is composed of the same material as the whole universe...Man is the most representative being in the universe, the microcosm, a small universe in himself.<sup>56</sup>

This also reminds us of Vivekananda's famous definition of God and man. 'Man', he said, 'is an infinite circle whose circumference is nowhere, but the centre is located in one spot; and God is an infinite circle whose circumference is nowhere, but whose centre is everywhere.'<sup>57</sup>

Nearly half a century later Schrodinger echoes these very ideas in his Cambridge lectures on modern physics. The principle of the identification of macrocosm and microcosm, the basic unity of man and the ultimate reality, as we see, is common both to modern physics and the ancient Vedanta philosophy. On the contrary it is not only alien but blasphemous in the Judeo-Christian tradition. 'In Christian terminology to say', writes Schrodinger, "Hence I am God Almighty" sounds both blasphemous and lunatic. But please disregard these connotations for the moment and consider the above reference (that the individual is identical with the Cosmic I or Atman = Brahman) is not the closest a biologist can get to proving God and immortality at a stroke.<sup>58</sup>

53. Ibid, 26th September 1982, p. 70

54. Ibid, p. 87

55. *Complete Works* 7: 50

56. *Complete Works* 4: 49

57. Ibid 2:33

58. *Mind and Matter* p. 93

# EINSTEIN AND VIVEKANANDA

JOHN L. DOBSON

Swami Vivekananda, in 1895 or 1896, asked Nikola Tesla if he could show that what we call matter (mass) was simply potential energy. Tesla apparently failed to show it—and it was not shown till 1905 by Albert Einstein who, at that time, was an unknown physicist working as clerk in a patent office in Bern, Switzerland. Although by now Einstein's equation for the equivalence of mass and energy has become the most famous equation of physics, Einstein himself did not become famous till 1919. Meanwhile, in 1902, Swami Vivekananda had passed away and no one seems to have noticed that his problem had been solved and that Einstein's famous equation,  $E = m$  (often written  $E = mc^2$ ), was the equation which he had requested of Tesla nine or ten years earlier.

There are several reasons why no one noticed. The first reason is that the Swamis of the Ramakrishna Order do not usually study physics as physicists. The second reason is that the physicists of Europe and America do not usually study Vedanta. A third reason is that the physicists of Europe and America usually misinterpret Einstein's equations.

Several years ago, at the University of California in Berkeley, I had an occasion to address a large audience of physicists and astronomers, chairmen of departments, directors of observatories etc., and I asked for a show of hands on the meaning of Einstein's equation,  $E = mc^2$ . American audiences have not studied 'non-cooperation' under Gandhiji, and they were willing to give a show of hands that 65% of them thought that this equation meant that energy could be converted to mass and that mass could be converted to

energy much as, in a swinging pendulum, gravitational energy is converted to kinetic energy on the down-swing and kinetic energy is converted to gravitational energy on the up-swing. In that whole audience only five hands went up to indicate that that was not the meaning of his equation. Then I pointed out that that was not his meaning and that if that had been what he meant, Einstein would have written  $E + m = K$  (The sum of mass and energy is a constant), and I wrote it on the board. They all knew how to read equations, and they all knew that that was what he would have written, and they were much embarrassed. (I was later informed that in a meeting of such distinguished people no one asks for audience participation.)

Einstein's equation for the space-time separation between two events, as seen by different observers, is similarly misinterpreted. Usually the commentators say that where one observer sees more time and less space between two events, another observer, moving with respect to the first, will see more space and less time. But that statement makes time another dimension of space, whereas, in Einstein's equation, space and time enter as a pair of opposites so that the observer who sees the larger time separation sees also the larger space. Einstein never liked the term 'relativity theory'. He wanted it called the theory of invariance and, if he had had his way, this mistake might have been less usual.

Swami Vivekananda was first and foremost an Advaitin (non-dualist), and he saw that, like Sankhya, the physics of his day was dualistic. It believed in matter and energy. Swamiji wanted that mistake corrected. Had it been corrected



by Tesla, while Swamiji was still in America, relativity theory would have been associated with Swamiji's Advaita, and we can well imagine what turn the history of modern science might have taken. But Tesla apparently failed and the task fell to Einstein after Swamiji was gone, and, in those early days, no one seems to have connected Einstein's solution with Swamiji's problem of nine or ten years earlier.

Being an Advaitin, Swamiji also suggested that the chemists would have finished their job when they could show that all the chemical elements could be made from only one of them. It had been suggested by Prout, in 1815, that they were all made of hydrogen, but in those days no one knew where it could happen. We now know that it happens at very high temperatures in the bellies of the stars and in the brilliant stellar explosions which scatter the heavier elements all through the galaxies, and that the elements of which our Earth and our bodies are made were fashioned from hydrogen by the gravity of massive stars. We must remember that some of the developments of modern science have made the universe very much easier to understand than it was in Swamiji's day, and we may now think of the primordial hydrogen as Swamiji's Akasha ('the first principle of materiality') and of its gravitational energy as his Prana. He used to say that by the action of this Prana on the Akasha all this universe is fashioned. We know now that he was right. It is much simpler than we thought, and we know now that, since the entire universe is made out of hydrogen, if we can understand the nature and origin of hydrogen we can understand everything.

To understand hydrogen we must first understand what kind of energy makes it massive. If  $E = m$ , what kind of energy is all this mass? It is important to remember that it is a very sizeable

amount of energy. One kilogram of matter is the energy of a thousand atomic blasts. It is enough energy to blow a cubic mile of rock to powder and put it in the stratosphere. That is the energy value of one litre of milk on the open market, and, in the light of modern physics and astronomy, we do understand what kind of energy it is. It is potential energy. It is gravitational, electrical and nuclear energy, and they are all the same thing. They are the two sides and the edge of the same coin.

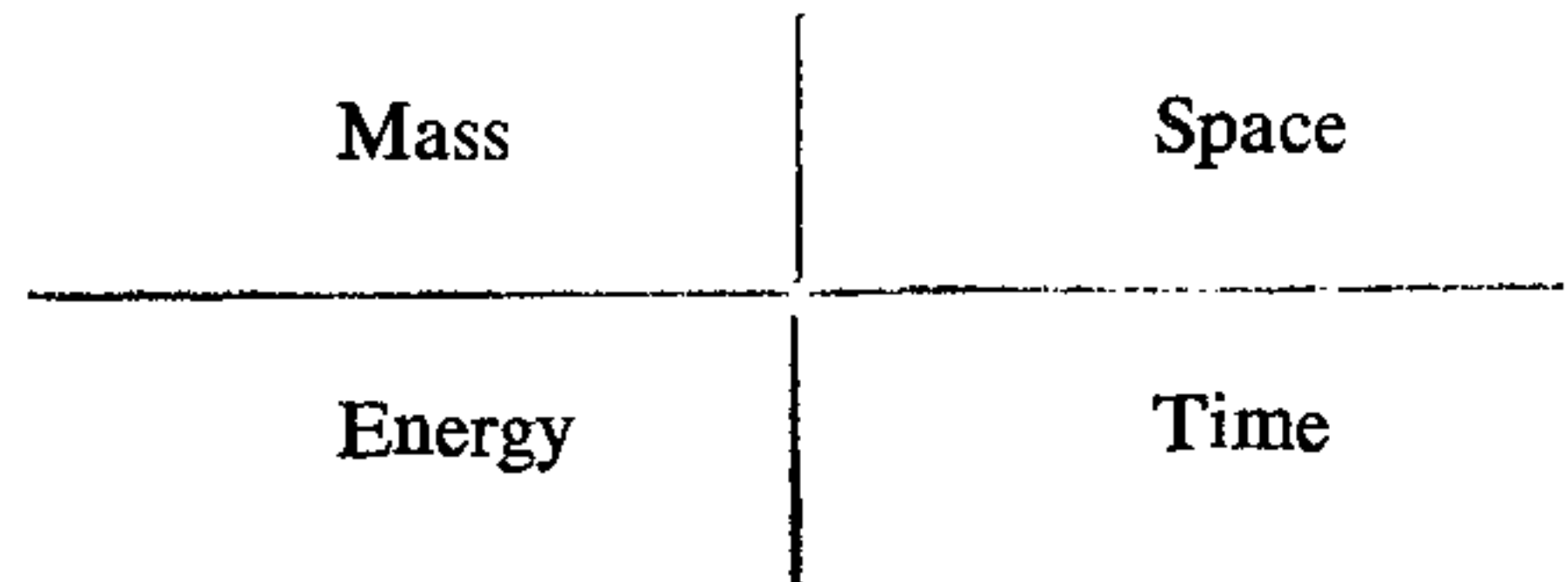
There are collapsed stars with densities of about a hundred thousand battleships in a half-litre jar. If we were to drop a kilogram of matter, say a litre of milk, to the surface of such a star, the gravitational energy released to kinetic energy in the fall would be about a hundred grams, or one tenth of its rest energy. The splash would be like the explosion of a hundred atomic bombs. If we could put all the matter of the observable universe in one place and pour our litre of milk in, then the gravitational energy released would be that of a thousand atom bombs, or its entire rest energy. But the rest energy of our milk is also electrical because, like the rest of the universe, it is made of minute electrical charges which have an energy associated with their smallness. For reasons which we are about to investigate, electrical charge, whether positive or negative, is self-repulsive, and the energy associated with the smallness of these self-repulsive charges is, once again, one thousand atom bombs per kilogram. Gravity and electricity are opposites. They are what we call energies of position. To know where a charge is is to know where it is with respect to all other charges in the observable universe, and that gives it its gravitational energy. And to know where a charge is is to know that it is small, and that gives it its electrical rest energy. But to know where something is in space and time is

associated, through the uncertainty principle, with an indeterminacy in its momentum and its energy, and, in the case of the hydrogen, the energy associated with this indeterminacy is also one thousand atom bombs per kilogram. These three energies are the two sides and the edge of our coin.

By interpreting Einstein's famous equation as it is written and as he himself interpreted it, we are able to understand the rest energy of the primordial hydrogen. But that equation is simply a consequence of a much more fundamental change which he introduced into our understanding of geometry. Toward the close of the last century it was becoming clear that the universe is not objective in three dimensions. Observers, moving with respect to each other, cannot agree on the measured distances between events, not on the lengths of time that have elapsed between them. In 1905 Einstein pointed out that time must come into Pythagorus' equation for the separation between two events because time is the fourth dimension of the geometry of the real world. But, as I mentioned earlier, the square of the time separation between two events comes into that equation with a minus sign because space and time are opposites. And that equation sets the separation between the perceiver and the perceived at zero. (If a light beam can get from one event to another in vacuum, then the space and time separations between those two events are equal and the total separation is zero. For any event which we can see, the separation between that event and its perception is zero.) But space and time can be opposites only by being identical. Plus and minus electrical charges are opposites only because they are both electrical charges.

Now this Advaita, introduced by Einstein, makes it possible for us to understand our physics in a new and interesting way. In the last century we

thought that the universe consisted of real particles with mass and real energy moving through real space in real time. We thought that mass, energy, space and time were all independent entities, and we may conveniently represent it by a diagram.



#### The world-view of classical physics

But we just saw that Einstein's geometry takes out the line between space and time, and that his physics takes out the line between mass and energy. That leaves us with a mass-energy discontinuum on the left and a space-time continuum on the right. And, in our investigation into what makes hydrogen massive, we already saw that the vertical line drops out of our diagram, because what we see as the mass-energy discontinuum on the left is simply a geometrical wind-up against the space-time continuum on the right.

Now when the lines of demarcation between mass, energy, space and time are obliterated, we are left, not with a new model of the universe, but only with a question mark, and with the suggestion that what it represents is beyond space and time. What exists beyond our physics must, therefore, be changeless, infinite and undivided, because dividedness and smallness can be only in space, and change can be only in time.

It is not that these are three characteristics of the reality beyond space and time (Swamiji's Absolute), but only that, looking from our position in space and time, we look in different directions and give it different names. Seen beyond the changes of time, it is said to be changeless. Seen beyond the smallness of the charges



in space it is said to be infinite. And seen beyond the dispersion of matter through space it is said to be undivided. It appears to be threefold only from our point of view within space and time.

But if Swamiji's Advaita, introduced into our physics by Einstein, points to Swamiji's Absolute behind our physics, then how do we see it as gravity, electricity and inertia, and why is it associated with this necessary uncertainty? And, if what really exists is undivided, infinite and changeless, why do we see it as hydrogen? Why do we see it as divided into atoms, made of minute particles and continually changing? How can we get from the changeless to the changing?

First, we cannot get there by the causation of our physics without actually changing the changeless. Furthermore, we cannot account for the origin of the causation of our physics because that causation is governed by what we call the conservation laws. The energy at the end of a change is always equal to the energy at the beginning. Only the form of the energy changes; never the amount. That is why we call it transformational causation. In Sanskrit it is called Parinama. It is like making milk into buttermilk. If you start with one litre of milk, you will end up with one litre of buttermilk. But, unlike the buttermilk, the hydrogen does not arise from something else. The rest of the universe arises from hydrogen by Parinama (the causation of our physics) but the hydrogen itself (Swamiji's Akasha) cannot arise in that way. How then does it arise?

Quantum mechanics suggests that it arises through an uncertainty. The root notion in quantum mechanics is Heisenberg's uncertainty principle which states that if we know the position of a particle in space we cannot know its momentum, and if we know the position of an event in time we cannot know its energy. In

short: if we see something in space and time there will always be an uncertainty about what it is that we see. It is like mistaking a rope for a snake. There will always be an uncertainty about the snake. Let us call this 'apparitional' causation (in Sanskrit it is called Vivarta), and let us examine the consequences to our physics. If, through an uncertainty, we have indeed mistaken the Absolute for the relative, in what way must that mistake show up in our physics? In what way must the rope show up in the snake?

The Vedantins, long ago, analysed this kind of causation and pointed out that it has three aspects. When we mistake a rope for a snake, first we fail to see the rope rightly. That is the veiling power of Tamas. Then we jump to the wrong conclusion. That is the projecting power of Rajas. Finally we saw the rope in the first place. That is the revealing power of Sattva. Otherwise we might have mistaken it for a rickshaw or a cow. It is the length and diameter of the rope which we see as the length and diameter of the snake.

If, then, we have mistaken the changeless, the infinite and the undivided for something else, it can only be changing, finite and divided. So far, so good; our hydrogen certainly appears to be continually changing, made of minute particles and divided into atoms. But the changeless, the infinite and the undivided must also show in our physics, just as the length and diameter of the rope must show as the length and diameter of the snake for which it is mistaken. Once again, so far, so good. The changeless shows in our physics as inertia. The infinite and the undivided show as electricity and gravity. That is why hydrogen is made of gravity, electricity and inertia and not something else. There are no other ingredients out of which it could be made. There is only the nature of the reality seen in space and

time. Energy is apparitional. Only its changes are transformational, and the gravitational energy can go to zero only if the dividedness goes to zero. The electrical energy can go to zero only if the size of the charges goes to infinity. And the nuclear energy can go to zero only in the absence of the uncertainty.

Our physics itself is evidence that what we have seen is the changeless, the infinite and the undivided. After a lecture in Calcutta I was asked, 'How do you know that it's not superimposed on nothing?' 'No, no, no!' I said, 'Then the zero would show in our physics. That's not what shows. It's the infinitude of Brahman that shows in our physics. The infinitude shows as electricity, the changelessness shows as inertia and the undividedness shows as gravity. If the Advaitins weren't right, our physics would have been different.'

Swamiji wanted Advaita brought into our physics. It was brought in by Einstein's equations and by Heisenberg's uncertainty

principle. These are the equations of Vedanta, and with them came the explanation for gravity, electricity and inertia. There is no such thing as matter. There is only energy. It is an apparition. It is a very serious mistake. It is not possible to see this mistake and not have it wound up to one thousand atom bombs per kilogram. Energy is apparitional. Only its changes are transformational. From the Absolute to the primordial hydrogen and its gravity (Swamiji's Akasha and Prana) is through Vivarta (apparition). From that to what we see around us is through Parinama, by the action of that gravity on the hydrogen (by the action of the Prana on the Akasha).

Swamiji said in London, in 1896, 'The Absolute has become the universe by coming through time, space and causation. This is the central idea of Advaita. Time, space and causation are like the glass through which the Absolute is seen, and when It is seen on the lower side, It appears as the universe.'

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(Continued from page 23)

see the Light.'<sup>23</sup> Said one of the nuns about Sister's death: 'You could feel during those last days that Swamiji was with her. She would sometimes gesture as if she were trying to touch something.' 'Looking into her face', said another, 'such a feeling of joy came over me!'

This joy is contagious. Only the person

who has experienced joy can share that joy with others. Ananda—joy—bliss is Brahman. Coming in contact with the disciples of Sri Ramakrishna, Sister Lalita's life was transformed, and she floated in bliss and peace. As a flower offers fragrance and beauty to mankind, so Sister offered herself to God, and her self-effacing, calm and contented life brought joy and inspiration to all who knew her. God 'loves the unknown adorers of the world'.

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<sup>23</sup>. Brahmacharini Usha [Pravrajika Ananda-prana], op cit p. 60



## REVIEWS AND NOTICES

**VEDIC CONCEPT OF GOD BY VIDYANANDA SARASWATI.** Published by Deva Vedic Prakashana, Bombay. Distributed by Motilal Banarsidass, Bungalow Road, Jawaharnagar, Delhi 110 007. 1984. Pp. 174. Rs. 20/-.

'Augustine wrote a work of 15 books on the Trinity. Yet, when he stood with his mother at the window of his house and sought to express his profound sense he felt of being in the grasp of God, he spoke not of the Trinity, but of the one God in whose presence the soul is lifted above itself and all words and signs' (P. 35). This is a telling illustration, cited by the author, to bring home the fact that whatever be the philosophical or metaphysical arguments for or against the existence of God, one capital experience of the Presence overrules all mental jugglery. Swamiji discusses the different types of theism and their mutual criticisms, and calls for a progressive understanding of the issues involved from the point of view of physical science, laws of evolution and the essentials of religions.

Speaking of the three Eternals, namely, God, Matter and Souls, he writes: 'All the three exist by themselves; the three are all uncreated and imperishable; but the latter two are so related with the first that God is their governor and guide.' (P. 44)

Though this creation is a world of finites, the author points out, the finites exist because of an Infinite supporting them. In fact the Infinite indwells each finite. On the subject of Incarnation, he states: 'The incarnation of God is the demonstration of the evolution of man's spiritual resources and latent divinity. It is not the contraction of the Divine into the limits of the human frame, as the sublimation, exaltation or elevation of human nature to the level of godhead by its union with the Divine.' The writer does not admit the possibility of God manifesting in human form. He says it is some extraordinary

human beings endowed with unusual qualities and capacities who are called avatars.

Does God have attributes? Yes, but He can also be free of attributes. If He is described as Being, He is also Non-Being, in the sense that what we understand by being-ness does not exhaust Him; He transcends our definitions. How far does God govern our lives? In other words, is determinism the truth or free-will? 'An Arab came to Ali (Caliph) and asked for his verdict on this difficult subject. Ali asked the man to lift one of his legs. The Arab did it easily. Then he was asked to lift the other leg. It was impossible for him to do so. Ali said, "Well, here lies the truth. You were free to lift either of the legs you choose. But, having lifted one of your legs, you cannot now lift the other one. We are free, there is no doubt about it. But beyond a certain limit, we are not free at all."' There is an overall Law reflecting the Will of God; within it we have a sense of freedom to choose.

Two chapters are devoted to the topic of God and Soul. What is the soul? A product of bodily functions or something superior to the body? Read Victor Hugo: 'You say the soul is nothing but the resultant of bodily powers. Why, then, is my soul more luminous when my bodily powers begin to fail? Winter is on my head, but the eternal spring is in my heart. I breathe at this hour the fragrance of the lilies, the violets and the roses as at twenty years. The nearer I approach the end, the plainer I hear around me the symphonies of the worlds which invite me. It is marvellous, yet simple.' (P. 95)

The chapters on God and World, God and Maya are well argued with abundant quotations from the scriptures. The whole discussion is informative and enlightening though one may not agree with every conclusion of the author.

SRI M.P. PANDIT  
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## NOTES AND COMMENTS

### *The Constructive Aspect of Religion*

The communal riot that rocked Bhiwandi, Thane and Bombay in Maharashtra in May 1984 came as one more ghastly demonstration of the destructive power of religion. Violence erupted at fifty different locations. Several shanty-towns were looted and set ablaze ; powerlooms, machine shops, warehouses, sawmills, garages, trucks and more than 10,000 houses and shops were gutted—leaving 300 people dead, 1,000 injured and 50,000 people homeless. If this gruesome calamity did not attract as much attention as it deserved, it was because Indian people had got used to it. Frequent occurrence of such terrible events has deadened human conscience, and people have come to accept them as a permanent feature of the country's socio-political scenario.

On the other hand, these unfortunate events have undermined the credibility of the principle of secularism and have raised serious doubts in sensitive minds regarding the usefulness of religion as a social institution. Speaking at the inaugural function of the Minority Rights Group, an autonomous body of intellectuals, on 16 August 1984, Sri H.R. Khanna, former justice of the Supreme Court, pointed out the danger to secularism from the expanding role of religion in politics. 'Secularism', he declared, 'is a delicate and fragile plant and has to be tended with care and devotion. It may not be difficult to damage and hurt, but once it dries up or gets uprooted, it would be difficult to revive it.'

Religion being a matter of personal faith, the proper place for it in a secular state was in homes and temples, mosques, gurudwaras and churches, not the halls of Parliament and state legislatures, Justice Khanna said. The fact that despite our constitutional commitment to secularism our national life had been plagued by communal riots showed that mere adoption of nobly worded provisions was not enough. He said he believed that the main responsibility for ensuring communal amity lay with the majority community. 'It can indeed be said that the index of the level of civilization and catholicity of a nation can be gauged from how far its minorities feel secure and not subjected to any discrimination or oppression.' But he added, 'At the same time, it needs to be mentioned that no country can put up with any section of its population entertaining feelings of extra-territorial loyalty.' He further pointed out that the purpose of giving special rights to minorities was not to create a privileged or pampered section of the population but to give minorities a sense of security and confidence and to bring about social equilibrium and equality.

The persistence of communal disturbances and religious chauvinism as a threat to national integrity makes one thing clear: secularism as it is now conceived has succeeded only in repressing the constructive role of religion in society but not in eliminating its destructive role. Religion is not merely the personal concern of individuals but has also a social dimension. It has a constructive role to play in social life, in communal harmony and national integration. A neutral concept like secularism needs to be supported by the positive and constructive power of religion ; otherwise it will be tipped by the negative and destructive power of religion.

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