# VIVEKANANDA'S PHILOSOPHY-BLENDING PHILOSOPHY AND SCIENCE

#### Vivek Gulati

Research Scholar Department of Philosophy Kurukshetra University Kurukshetra, Haryana India

#### **Abstract**

Journey of science from the 19th century concept of atom to the creation of universe (big bang theory), inclusive of dark energy dark matter enigma of 21st century, is briefed along with the corresponding concepts of Vedanta as propounded by Swami Vivekananda. Swamiji envisioned in 1890, that the micro-world & macro-world are built on the same plan. He spoke of interdependence of every species in nature, popularised as ecology in 21st century. He propounded from Vedanta that: Matter & Energy are the same, proved later by Einstein. Indeterminacy to be the innate characteristic of nature, viewed through the prism of time, space & causation; akin to Heisenberg's uncertainty principle proved decades later. Creation of universe started from infinitesimally small with infinite energy primordial stage, termed singularity-- corresponding to Vedantic terminology of Anidavatam (no vibration) -from which sprang forth time space, energy, matter. But while the Vedantic concept speaks of alternate big bang and big crunch- continuing since eternity, science is silent on state before singularity, which science says started 13.8 billion years ago. Like a scientist, Swamiji explained abstruse philosophical thoughts making them as factual scientific truths, than using abstract philosophical jargons of a mystic.

**Keywords:** Atom, energy, Vedanta, uncertainty principle, ecology, big bang, singularity, Anidavatam, creation of the universe, dark energy and dark matter.

# 1. Introduction

We are born, we live, and we depart this life. For a whilst after death, the bereaved mourn our loss, but that wanes fast, making the olden times of our subsistence lost like the lifeless waves of a dropped pebble.

There are, however, the great ones whose role is colossal enough to keep their reminiscences alive long after they are gone. And, then there are the masters whose authority continues like an overturned cone – mounting in space with time.

The Swami Vivekananda belongs to this last class of masters. As any unprejudiced bystander can witness, The Swami's contribution continues to persuade us more vigorously as we progress on the wheel of time. This can be preeminent evidenced by the rising number of institutions in his name, life sacrifices made by the youthful following his idyllic, and the extensive range of programmes held frequently in his respect- All this, without state patronage.

The Swami's contribution was colossal, as can be seen by volumes of erudite works by the greats. Of these contributions, the most significant one to stand out is his idea of comprehensiveness at all levels of human actions.

Hindu dharma, or Hinduism, at it is popularly known, is an all-encompassing religion, which basically means that it absorbs every kind of knowledge and practices that comes it way. This, of course, is not on every day basis, but the great sages of an epoch do it for the masses. The pious influence of these sages makes people accept their words as holy, and Hinduism gets a new vivacity.

If one imagines Hinduism as a chain of hour glasses, then there seem to be three main, and quite a few trivial exits in the form of saintly personalities through which Hinduism flows, fans out, and is gathered, as happens with sand in an hour glass.<sup>1</sup>

The foremost of these personalities was Vyasa who accommodated the spiritual practices and ethnicity of various groups who were not following the Vedic tradition. The second persona was Shankaracharya who wove conflicting Hindu philosophies and religious practices into a prototype to launch Vedanta as the philosophy of Hinduism.

The third was Sri Ramakrishna – Vivekananda. Sri Ramakrishna showed through his saintly realizations how every religion was a portico of the same limitless, while The Swami Vivekananda took this amalgamation a footstep onward to show how religion, science, and society were all amalgamated at a primary level, and hence one could not be left out for the other.

Here I discuss only in concise, very brief in fact, his relationship with science as it has already been discussed in detail in previous chapter.

#### 1.1 The Swami's rendezvous with Science

We know from The Swami's life history that even though he was a recognized scholar of Arts, and was not really at ease with mathematics, his curiosity in science and scientific temper was gigantic. Whenever he came across a superior book on science he comprehended it, and he loved interacting with individuals from science milieu. In one incident, he met an engineer during his travels through India in 1880s. The engineer was astounded to see how well The Swami implicit the functioning of electric dynamos.<sup>2</sup>

In his early on days in the west, The Swami moved around the Chicago world fair, appreciating the wonderful creations of the contemporary science. Synthesising his understanding of the role of science in making the India of future, he used to say that "we fancy western science coupled with traditional Indian ethics". More importantly, he had predicted in lucid stipulations the collapse of caste structure due to the stretch of technology. Much earlier than inventions of labour saving machinery became prevalent; The Swami had categorically said that the *Shudra* class will go away from India, and that their work will be taken over by the machines. What a divination!

Anywhere The Swami went, he tried to meet up the illumined minds of the soil. In the course of action he had met the likes of Professor Max Muller, Paul Deussen, William James, and many more. Fascinatingly, he had also met, and had been invited home by Hiram Maxim, a great technocrat and the originator of machine gun.

The cake, however, goes to Nikola Tesla when it comes to The Swami's rendezvous with science.

Tesla, as is now well known, was a better originator than Edison, and a highly triumphant engineer who is responsible for the current day AC Electrical supply structure apart from many erstwhile such contributions. He was also a physicist of status and had his hands in almost every branch of Physics of his period. We find in The Swami's life history and his correspondence how Tesla used to come and attend The Swami's lectures. Tesla was intensely stunned by The Swami's staging of Vedic view of Creation, as per which energy acts upon itself to generate matter. Tesla wanted to construct a scientific replica out of it, which, regrettably, did not turn up.

On the Indian facade, The Swami chanced to meet Tata on his way to America. Tata envisaged strategy of bringing the steel manufacturing to the nation, while The Swami stressed on the want of science edification and scientific temper in India, based on its earliest ascetic strength. Amazed, Tata quoted to The Swami in 1898, "I believe you memorize me as a travel companion on your expedition from Japan to Chicago. I very much recollect at this instant your view on the augmentation of the ascetic strength in India... I recall these ideas in association with my plan of Research Institute of Science for India, of which you have obviously heard or read." This plan evolved into the foundation of Indian Institute of Science, Bangalore-one of the leading scientific institute in the country today.

The Swami had also met the well-known scientist Sir JC Bose, and had longed-for his work vastly. Later, The Swami's dedicated devotee Sister Nivedita was intensely involved in promoting him, his effort, and combating for the origin of science in India.

Those not well-known with The Swami's life, or with Vedanta, may speculate on how religion and science can go hand in hand, and, more significantly, how can a preacher be even distantly associated with science and logic? Isn't religious conviction all about unsighted belief and recognition?

This requires a gentle description on the methods of knowledge followed in science and Vedanta.

#### 1.2 Being Scientific

Like any other twig of knowledge, science too has its allocate of philosophies that can be largely classified into three – Positivism, Realism, and Idealism. Their relative advance can be explained by the equivalence of a fruit falling from a tree in a forest which no one has witnessed. According to Positivists, the fruit certainly not fell since no one observed it, according to Realists, the fruit fell irrespective of any examination and according to the Idealists, and the fruit certainly fell because there is God to watch it.

The science of contemporary times keeps wavering mainly among the Positivists and Realists. For Positivists, only sensory input makes a case for scientific discipline<sup>6</sup>. Later, they added logic and reason as a convincing ways of knowledge.

In concise, science accepts sensory input and logic that may show the way to quantification as the only convincing means of knowledge.

Hinduism accepts these two methods of knowledge as revered. Acharya Shankara, the supreme philosopher that India has witnessed, asserted repetitively that no knowledge, holy or logical, can ever be considered accurate if it contradicts proof based on straight insight. However, Hinduism accepts the strength of instinctive sacred truths, realised in the depths of contemplation. But still these truths must obey the rules of the truths preached by the former saints whose saintly realisations are recorded in the Vedas.<sup>7</sup>

Unlike science, thus, Hinduism accepts that the approach to knowledge is through acuity, logic, and instinctive consciousness, which is also known as indirect perception, since religious facts can neither be grappled with the help of the senses, nor can these be reasoned out.

Here it would be appropriate to cite that no master of religion ever goes against logic, or against the active accepting of the physical world. The time warp is for the next generation preachers of the language of the masters.

# 2. The Swami and Science

The Swami looked at the discoveries of science as remote reverberation of Vedanta, which means that he never saw any disagreement between the two, and also felt the want of one to harmonize the other.

I will now take up a few of the more significant notes of The Swami related to science.

# 2.1. Need for Scientific Temper in Religion

The Swami's immense gift was to inculcate scientific temper in religion. His approach was not to deem in anything unless one realised that reality, or at least waited for a enhanced description to come up. For instance, he did not recognize miracles as such, but he also did not reject their subsistence. He supposed that there were superior extrasensory forces present in the nature beyond the acquaintance of sciences. But these too were forces only, obeying rules concerning which we did not hitherto know much. Amusingly, The Swami did talk about a set of Yogic powers, extra sensory perception, and acts. He himself had a reasonable familiarity of them, but he strongly supposed these to obey advanced rules.

When it came to the language of scriptures, The Swami emphasized on the want for one's own sacred consciousness as the most vital investigation of truth in religion. Words, howsoever holy, were sheer prattle for the non-realised. Certainly, how does it matter to any if Ambani is the richest person in the nation? We are not going to get even a single penny from him. So, how does it matter to a devotee if he claims his religion to be the utmost? He can only laze around in the splendour of his unintelligent conviction without raising a grain. The goal is to comprehend at least reality as recorded in the scripture of that belief. Why drop blood over it? Or,

generate vocal pandemonium around its words. Yes, religion is comprehension; everything else is debris and foam.<sup>9</sup>

#### 2.2 The Basic Harmony of Science and Spirituality

The Swami resolutely supposed in the amalgamated solitary force at the back of all other forces in natural world. As per him, the day that force was discovered, Physics would reach its finale. Let us bear in mind that when The Swami was talking about this, Maxwell's equations connecting electricity and magnetism, and Joule's linking of heat with motion was lately born, and Einstein was yet to come on scene to bond a lot of things mutually. Electron was yet to be revealed, and the very theory of the whole thing that would combine the different forces – gravity, electromagnetic, weak nuclear force and strong nuclear force, was not even a remote trance.

In Chemistry too, The Swami talked regarding the one building block from which all other are copied. The Swami was talking about it when indivisibility and exclusivity of atom of every element, as formulated by Dalton which was the only rampant hypothesis. Certainly The Swami was conversing regarding this amalgamation normally, but we also have to to keep in mind that he was not bringing in creationism, according to which everything is produced by the explicit acts of the heavenly.

# 2.3. Evolution of Consciousness

The Swami supposed development as the unfolding of realization through bodies, and not as sheer development of species or genes. The synchronization of science and Philosophy springing up from this loom is certainly miraculous. If realization, which belongs to *Atman*, has to manifest itself completely, as in the case of masters like Buddha, it has to have a fabulous mind, and subsequently a perfect body. This of course does not mean that human beings are at the uppermost stair of evolution. To a certain extent, it speaks of the kind of evolved mind that it requires being progressive.

A much-loved thought of The Swami, which was mentioned previously was the thought of conception as an act of energy thrashing itself from which advanced particles came up, and conception proceeded. This hypothesis, based on *Nasadiya Sukta*, of the Rig Veda, speaks of creation without the intrusion of God in the act, but simultaneously retains the idea of God fully.<sup>11</sup>

One realm of disagreement between philosophy and science is the formation of mind and matter from each other. Philosophy believes that matter came out of mind, while current day scientists and materialists believe it to be the other way. The Swami supposed that mind-matter-mind was like a certainly not an ending string, but an ongoing process. Depending on which linkage one held, the other linkage of the string appeared to be approaching after that.

# 2.4. Importance of Intuitive Wisdom

At whatever time one thinks of science, the initial thought that strikes the mind is laboratories and experiments, i.e., the advance as by the Positivists. Interpreting The Swami, one realises how instinctive knowledge plays the largely significant role in science too, beyond its ostensible reliance on positivism. The Swami supposed, in accordance with Vedanta, that microcosm and macrocosm are envisaged on the identical arrangement. When The Swami was talking about it, the atoms were still considered to be an undividable solitary unit, as per Dalton's atomic hypothesis. The detection of electrons was years away, and that of protons was still few decades away. It is only now that one can carefully visualize that facts have correspondence between the smallest of the atom, and biggest of the cosmos.<sup>12</sup>

The Swami treated space as endless, but predetermined and bent – it has no edge, but is limited as earth is. He explained it with the consideration test that if a line were to be extended substantially in space, it would at last come back to its initial point.

What is astonishing concerning this is that during The Swami's time, Euclidean geometry only was accepted, and people believed space to be endless? The geometry of 3D, formalised by Riemann in 1850's, had just happening to trickle in. This was later used by Einstein to offer a mathematical replica of space which he treated as bent on itself!!! The scientific models similar to big bang are based on this thought of space only – something that was unthinkable in The Swami's times. 13

# 3. India's way to Greatness through Amalgamation of Science and Spirituality

The Swami hoped that make use of of science and scientific temper unaided can eliminate the multi cancerous malady of Then Indian humanity. He exhorted his brother monks to go to villages and educate people with the aid of globe, magical lantern etc. so that they can come out of their calcified unawareness and ascend the world phase, as an substitute of being a speechless spectator to the walk of other nations.

The need of expertise in everydaily life, as also hard work was so vital for The Swami that he wished India to follow Japan in these matters.

The Swami had whispered in one of the casual talks a while before his famous Chicago address, "I consider that the Hindu belief has developed the religious in its devotees at the cost of the material, and I think that in the Western world the opposing is true. By uniting the materialism of the West with the spiritualism of the East I consider much can be skilled. It may be that in the endeavour the Hindu belief will lose a great deal of its individualism.... still the religion would stay unimpaired." <sup>14</sup>

However, The Swami wanted the austere spirit of India to be the leading strength behind all such developments, as mentioned in his discussion with Tata.

People by and large are of the notion that the two disciplines are on the warpath. The Swami made every possible effort for doing away with this erroneous notion from the minds of the masses. He said that science is the hunt for truth in the outside world, and religion is the search for truth in the inner world. Hard-pressed to the intense, they both meet as if there is one truth that is expressing itself inside and superficially. Authentic contentment requires a appropriate equilibrium between the two. This is where modern societies fall short, as science and engineering receives the lion's allocate of notice, upsetting the ideal balance. This creates an inner void, which results in a ceaseless hunt in the exterior world for realization of one's ravenous wishes. Science and engineering is over and over again held responsible for the cacophony between the interior and exterior, however, this blame is mislaid. According to The Swami cause of this restlessness is not science but unrestrained intellect. Science and spirituality bring regulate not anarchy, and this misinterpretation is why The Swami wanted to hit an equilibrium stuck between spirituality and science.

#### 3.1 Creation

Scientists have lately theorized the cosmos as we know it was shaped 13.8 billion years ago with the Big Bang. This endangered many religious theories about conception but Vedanta stood its ground. As The Swami says, "We know that in our books a clear dissimilarity is shown between two set of truths. The one set is that which abides eternally, being built upon the nature of man, the nature of the spirit, the soul's relation to God, the nature of God, excellence, and so on; there are also the values of cosmology, of the infinitude of conception, or more appropriately talking—protrusion, the magnificent law of recurring demonstration, and so on—these are the perpetual principles found on the widespread laws in nature." <sup>16</sup>

A notion prevails amongst the contemporary scientists of a recurring conception and that too The Swami asserts in his various writings, "At the end of a sequence, the whole thing becomes advanced and advanced and is determined back into the primitive condition from which it spring, and there it remains for a time dormant, prepared to bounce forth again. This is Srishti," <sup>17</sup>.

Scientists are go-getting to amalgamate various forms of energies available in the cosmos and in reality even had become successful to an enormous degree merely gravitational force and energy, till today, is not being acquiescent to the amalgamation. In Vedanta, all energies stand for inner and outer, which the technology and science has begun to comprehend. The Swami says," Has just revealed that what it calls heat, magnetism, electricity, and so onward, are all translatable into one unit force, and as such, it expresses all these by one name, no matter what you may choose to describe it. But this has been done even in the Samhita [Vedas]; old and olden as it is, in it we meet with this very thought of force I was referring to. All the forces, whether you name them gravitation, or pull, or push, whether expressing themselves as heat, or electricity, or magnetism, are not anything but the variation of that component energy. Whether they articulate themselves as deliberation, reflected from Antahkarana, the internal organs of man, or as act from an outer organ, the component from which they spring is what is called Prana. Yet again what is Prana? Prana is Spandana or pulsation". 18

The Swami as well talks of "desha-kala-nimitta; time, space, and causation", which as per Indian metaphysics shows a connection with the current ideas of space and time.

# 3.2 Evolution and Involution

All through The Swami's time, theory about evolution given by Charles Darwin was contentious because this refuted the representative religious dogma; On the contrary, the hypothesis, formulated in India in ancient times, is now well recognized as well commonly established. Previous century of technological advancement makes The Swami's statement emerge farsighted, "Every evolution assumes some kind of involution. The contemporary technical man will tell you that you can merely obtain the quantity of energy out of a machine which you have beforehand input into it <sup>19</sup> In the course of this concise declaration The Swami endorses the non-linear nature of time, and law of conservation of energy, and he applies it resourcefully to the laws of evolution, saying that it supposes involution. And not only that he pushes it to the religious nature of the human being by saying; 'If man is an evolution of a mollusk, then the ideal man—Buddha, Christ—was implicated in the mollusk. If it is not so, whence come these gargantuan personalities?" <sup>20</sup>

The Swami asserted his thoughts on the evolutionary theory by saying, "Are you not able to hear what your contemporary scientific men say? What is the source of evolution? Aspiration. The animal wants to do something, but does not find the surroundings favorable, and consequently develops a new body. Who develops it? The animal itself, its resolve You have developed from the lowly amoeba. Continue to do exercises your will and it will take you higher still" <sup>21</sup>. The Swami is consequently stressing on the power of *sadhana* to accelerate one's own evolution. Even though nature has an innate quality that helps combined spreading out of the species, The Swami exhorts us to put our will control to use. Analogous observations were made by Huxley in Evolution subsequent to Darwin, "In the beam of our current information, man's most inclusive endeavor is seen not as mere continued existence, not as geometric enhance, not as increased involvedness of association or increased control over its surroundings, but as greater fulfillment—the fuller comprehension of more potential by the human species collectively and more of its constituent members independently." This is exactly what we need to apply in our everyday life. Scientific data alone cannot do much unless a person translates it into measures through spirituality.

The Swami Ranganathananda says, "If the entire cosmos is the creation of a self-evolving source, as Vedanta and modern science defend, then that source must be there in all its evolutionary harvest, which then can have no realism apart from it. This consequence follows whether that cause is viewed as an intellectual belief as in Vedanta or as a non-intelligent belief as in science." He further adds, "Brahman is in man, but if we are to comprehend Him, we have to seek Him not in man's understandable sensate experience, but in the depth of his *buddhi*, intellect, which is the uppermost creation of evolution, organism the most luminous" <sup>24</sup>.

In his talk "The Cosmos" The Swami asserted, "At the commencement, the intellect becomes implicated; and in the end, that intellect gets evolved. The sum whole of the intellect displayed in the cosmos must, therefore, be the implicated universal intelligence recounting itself. This widespread intellect is what we call God. Call it by any other name, it is utterly convinced that in the origination there is that continual celestial intellect. This cosmic intellect gets involved, and it manifests, evolves itself, pending it becomes the faultless man. Then it goes flipside to its own cause That is why all the scriptures say, "In Him we be alive and move and have our life form." That is why all the scriptures advocate that we come from God and go back to God". 25

# 3.3 Nature of External Reality

The world we see is a gross materialization of realism professed and interpreted by our intelligence. The conventional world of physics, and our "realist" views, acknowledged an impolite alarm with the discoveries of the laws of quantum mechanics and its uncertainty principle. The quantum world of the sub-atom speaks of a dominion analogous to what Vedantins call *maya*. The Swami in his gleaming *Jnana* Yoga lectures brought a modern elucidation to this olden hypothesis, "The Maya of the Vedanta, in its most recent developed shape, is neither Idealism nor Realism, nor is it a hypothesis. It is a simple declaration of data—what we are and what we observe approximately around us" <sup>26</sup>. "There is neither how nor why actually; we only know that it is and that we can't aid it. Even to grab it, to draw a precise picture of it in our own mind, is away from our power" <sup>27</sup>.

Schrödinger is one of the pioneer of this line of science, which is absolutely astonishing to usual comprehension and has found practical application in abundant contemporary technologies by engineers. Walter Moore, Schrödinger's biographer, writes: "The unity and continuity of Vedanta are reflected in the unison and eternalness of wave mechanics. In 1925, the worldview of physics was a replica of a great machine poised of divisible interacting material particles. During the next few years, Schrödinger and Heisenberg and their group projected a cosmos based on superimposed indissoluble waves of chance amplitudes. This new vision would be completely dependable and consistent with the Vedantic concept of All in One."

# 4. Influence of Spirituality on Human Life

If we contrast a human being with a computer, the body is its hardware and its intellect is its software. The software is additionally separated into system and application software. Nature provides the essential software to each human being; application software desires to be acquired by each human being through learning, guidance, and growth. Just as computers are affected with malware and computer viruses, the mind also is exaggerated with variables that disconcert the complete system. To optimize computer recital, viruses must be detached. Likewise, to optimize human recital, mental impurity must be detached. The best way to do that is to put into practice of yoga.

Just as matter and mind is said to form a band, so subjects of science and Philosophy could be said to form a band of humankind's investigation of the same reality. The Swami's effort was to show that the outside and inside world is not split, that the gross melt into the fine and physics into metaphysics.

There has been a rising restlessness with old ideas of Philosophy, as they are mostly rooted in antique legends, making them hard to understand in today's modern society. Science has exerted a influential pressure on the human mind internationally, while philosophy has languished at the back with its ancient world views and rules. The Swami said, "When we want to study philosophy, we should relate this scientific development. The same belief holds fine here also." <sup>29</sup>.He showed that any happening has to be explained by the nature of the thing itself, as science does, and not depend on outer explanation like the older interpretation of philosophy do. That is why he says' "Just as there are millions of people who are prepared to accept as true a individual originator, there have also been thousands of the brightest minds in this world who felt that such ideas were not adequate for them, and wanted something higher, and where on earth religion was not wide sufficient to embrace all these minds, the result was that the brightest minds in society were always remote of religion; and never was this so marked as at the current time, especially in the west. To take in these minds, therefore, religion must become wide enough. Everything it claims must be judged from the point of view of rationale." <sup>30</sup>

"Science without religion is lame; Religion without science is sightless," said Albert Einstein. Reliance on both science and religion is requisite for sustainable enlargement of a modern society. Science augment physical wealth; religion augments tranquility and agreement in human associations. No person can stand on a single leg for a long time; similarly no society can step forward as a whole without standing on both legs of science and religion. Hence the modern civilization that prefers to pay more concentration to science and technology, while neglecting theology, is prone to suffering. Many social evils can be solved by a revitalization of theology in a new form given by The Swami. He said, "Modern science has actually completed the foundations of belief sturdy. That the entire cosmos is one is scientifically verifiable. What the metaphysicians describe "being", the physicist calls "matter", but there is no authentic fight between the two, for both are one."

During The Swami's time India was underdeveloped, wanting technology and industry. He consequently advised Indians to take the aid of Western science to exterminate poverty and unemployment and spotlight on education, fitness and hygiene. He knew that until the inhabitants were cultured and physically healthy, religion was a far cry. One of the reasons he went to the West was to employ experts in vocational training and get the monetary capital to start realistic institutions in India.

His ideas of learning were also far ahead of his time. Today we have mass education, distance education, and adult education, which are becoming more and more accessible to anybody wanting to chase their own development, in spite of social or economic position. It took more than a century to start moving on the track he initially acknowledged.

All through his life of training practical Vedanta, The Swami warned of the dangers of too much reliance on science and technology and insisted on preserving India's saintly heritage. He said, "Material science can only give worldly wise wealth, whilst spiritual science is for everlasting life. If there be no eternal life, still the happiness of spiritual approach as standards is keener and makes a man more satisfied, whilst the foolery of greediness leads to hostility and undue goal and final death, individual and national" <sup>33</sup>. Today we need to put into practice spirituality in our daily behavior. With the manifestation of the Atman one can master whatever thing in spite of the pasture of effort. Therefore, integrating theology in both individual and proficient life enhances one's position as a scientist or doctor. Just as iron can be made rust gratis by adding up alloying stuff, similarly a person can be made altruistic by adding theology.

# 4.1 Studies on Realization

The Swami made a very stimulating observation about gross matter, "Take whatever thing before you, the most material thing—take any one of these most worldly sciences, such as chemistry or physics, astronomy or biology—study it, push the study onward and onward, and the gross forms will begin to thaw out and turn out to be finer and finer, until they come to a point where you are leap to make a marvelous jump from these material things into the immaterial" <sup>34</sup>. Science tells us that gross matter obeys the laws of Newton, while fine matter follows the laws of quantum mechanics. All physical objects have mass and can be broken down into molecules, atoms, and further delicate particles. Physicists recently revealed new subatomic packets of energy known as Higgs-Bosons and established the method in which they are converted to matter. This scientific detection further points to the unity of the cosmos.

The typical model of physics is established and science, as a whole, is moving a step forwards towards comprehension of the nature of matter. But, spectacularly, till date scientists have only been able to investigate just about four per cent of the visible cosmos; the remaining ninety-six per cent of the cosmos remains uncharted. The uncharted cosmos consists of dark matter and dark energy.

In 1964 John Stewart Bell proposed a new theorem predicting the continuation of an never-ending wholeness combining object and slanted worlds holistically. Consequently, Physicist Alain Aspect experientially said that two photons budding out from the same cause, but moving in two differing direction, immediately converse with each other irrespective of the space they travelled. Henry Stapp, with the support of Alain Aspect's test, accomplished that things external to space and time have an effect on things inside space and time. In 1897 The Swami said: One atom in this cosmos can't shift without dragging the entire world along with it. Such comatose force may arise out of some continuous wholeness not obviously known to conservative scientists. Theorem of continuous wholeness was experimentally established by David Bohm and reported in his book published in 1980, Wholeness and the Implicate Order. Steadily, scientists on track started believing that over and above physical forces, realization is acting on the whole thing that exists either as physical or as a mental entity. This notion entirely conforms to Vedantic doctrine.

Neurologists, mathematicians, and physicists are trying to build up a scientific replica of realization. Two theories that are popular today are: "Orch-OR Theory" of Penrose and Hameroff;<sup>40</sup> and, Amit GoThe Swami's "monistic ontology ".<sup>41</sup> In brief, the former theory assumes that realization arises out of quantum crumple of very fine particles similar to microtubules, which source energized neurons to flames. Penrose, however, said that their theory can give details only the mathematical intellect of human brains and not anything more. Amit GoThe Swami's study on "monistic ontology" considers realization as the root source of the whole thing.

The Swami's prediction "science and religion will get together and wobble hands" has now come correct to some degree". He says, "You and I must be ingredient of the celestial realization, celestial life, and celestial mind." Many people believe mind and matter to be different entities. However, The Swami says mind is matter but of a finer material. He also claims there are a variety of degrees of the mind or consciousness, such as the subconscious and unconscious, which is a now a well-supported notion in the field of neuropsychology.

Scientists say that matter, as an outcome of millions of years of progressive fruition, has risen to become responsive of it. Vedanta and The Swami take the incongruous view, proposing the whole cosmos evolved out of realization. The Swami states, "Out of realization are evolved *Manas* or mind, the organs of the sanity, and the *Tanmatras* (particles of vision, sound, touch, etc.). All the fine particles are evolved from realization, and out of these fine particles come the gross rudiments which we call matter" <sup>42</sup>. Vedantists call this realization, in its absolute form, *Brahman* or *Atman*.

#### 4.2. A Case Forward – The Swami's Philosophy for Technocrats

The Swami on one occasion quoted: "Truths that we may learn from belief, not together from the comfort that we may gain from it, belief, as a science, as a study, is the most and healthiest work out that the human mind can have" <sup>43</sup>. Our mind has the capability to go beyond the shallow level we live in and can reach a cerebral state where realization expands. "Man is man so long as he is under attack to rise above nature and this nature is both interior and external" <sup>44</sup>. When this fight is with external variables, it is called science. When it is with interior variables, it is called yoga. The reputation of yoga and meditation all over the world attests to a lot of positive effects on bodily and psychological health. Many studies point out that meditation and yoga practice not only strengthen intellect but also help awaken higher individual traits. The Swami trained all information comes from the mind and the endless records of the cosmos resides within.

The Swami proposes, "Therapy for weak point is not menacing over weak spot, but opinion of might. Teach men of the power that is previously inside them" <sup>45</sup>. To be a feisty technocrat, enormous strength of mind and self-confidence is desired. In unison, physical power is not to be destabilized. The Swami advises: "If matter is powerful, thought is all-powerful. Bring this consideration to bear upon your existence, fill yourselves with the consideration of your almightiness, your splendor, and your glory" <sup>46</sup>. "Where is the scientific man of today who fears to concede the truth of this unison of the cosmos?" <sup>47</sup>.

Science educates us the rules of preservation of mass and energy. The Swami appended one more preservation law related to human belief and actions. He said, "Every thought that we think, every deed that we do, after a certain time becomes superior, goes into seed form, so to converse, and lives in the fine body in a latent form, and after a time it emerges again and bears its consequences. These consequences circumstance the life of man. Thus he moulds his own life. Man is not spring bound by any other rules apart from those which he carves for himself. Our thoughts, our words and actions are the threads of the net which we toss round ourselves, for good or for evil. Once we set in motion a definite power, we have to take the full cost of it. This is the commandment of Karma" 48.

Besides the sense organs what is vital for any human is the absolute manifestation of his brain, hand and heart. Technocrats take delivery of adequate teaching and preparation with regards to the development of their mental intellects but don't pay any heed to the other two components. This class just believes that logic and reasoning alone can only do away with the problems of the life. This class is not familiar with the troubles caused due to unclean heart and spirit. This class is also unfamiliar of the unethical application of this reason and logic. They forget that the masterminds of the most heinous crimes are even more logical than the greatest of the scientists. Apprehending this condition, The Swami recommended "man-making education" for each, but we are now enthusiastic to have only "money-making education". Technocrats are anticipated with ways of strapping up wealth for getting together all physical needs of the ordinary people without showing any prejudice towards any picky section of people. <sup>49</sup>

Express advances in the discoveries by the technocrats have made a brunt on in each and every realm wherever the existence exists. The advancement in emerging branches of science like the biotechnology, microbiology, biophysics etc. has even engineered our genes. The science of space exploration has scaled new peaks. Robots are being used to carry out surgeries. Even the space travel has become possible for a common man. <sup>50</sup> Such gigantic discoveries have also caused potent dangers to the extent of devastation of the entire planet. The Bio war has added to the list of these new discoveries which could be more alarming than the Hiroshima Nagasaki incident. So The Swami warns against such dangers and stands for synthesis of technology and ethics.

The green brigade of the technocrats is baffled today with the ever increasing ecological dilapidation.<sup>51</sup> As per their theories the only cause of this is the prosperity and affluence that pervades the modern day society. Newer technologies are erupting out each day to save and retrieve back the ecology. We are focusing more and more n green energy. Vision of The Swami can prove to be the solution to this contagion where he believes that every genus in the cosmos is interdependent and interwoven. We have to bring out this thought of The Swami in practical life and only then the interior decontamination along with ecology cleanup is a reality.

The philosophy given by The Swami should be able to sweep our brains and make it cleaner of the dirt and filth if any. This is the only solution through which divinity can pervade the entire world. For this is needed is not just theology but also the modern day science and technology. We need to go back to our foundation; to our strong culture.

#### 5. Conclusion: The Masterstroke of the Master

The commencement of something by a person is perpetually an annexe of his thoughts, the way a fruit is an expansion of the tree, following the same inherited design. So, by looking at the creation, one can know about the creator. When one looks at the Ramakrishna Mission, the establishment founded by The Swami in 1897, one gets a sense of The Swami's stance on the road to science.<sup>52</sup> Ramakrishna Mission is as scientific in its stance as can be. The monks here have no similitude to the archetypes monks of yore, who were calcified in their philosophy to the extent of believe that Sri Lanka was still ruled by *Vibhishan*!<sup>53</sup> The Swami broke those preposterous cage everlastingly, and came up with a new sort of monks who are thought to keep step with every kind of growth in The social order, and at the same time stay behind entrenched in theology.

Yes, that is what The Swami stood for – an amalgamation of religion and science.

#### References

- His Eastern and Western Disciples, The Life of The Swami Vivekananda, 2 vols (Kolkata: [1]. AdvaitaAshrama, 2008), 1.151.
- [2]. The Complete Works of The Swami Vivekananda, 9 vols (Calcutta: AdvaitaAshrama, 1–8, 1989, 9, 1997), 2.293.
- [3]. Julian Huxley, The Evolution of Life: Its Origin, History, and Future (Chicago: University of Chicago, 1960), 1.20.
- [4]. The Swami Ranganathananda, The Message of the Upanishads (Mumbai: BharatiyaVidyaBhavan, 2007), 472.
- The Complete Works of The Swami Vivekananda, 9 vols (Calcutta: AdvaitaAshrama, 1–8, 1989, 9, [5]. 1997), 2.209–10.
- Walter J Moore, A Life of Erwin Schrödinger, (Cambride: Cambridge University, 1994), 127. [6].
- Albert Einstein, Science, Philosophy and Religion: A Symposium (New York: The Journal of [7]. Philosophy, 1941).
- [8]. The Complete Works of The Swami Vivekananda, 9 vols (Calcutta: AdvaitaAshrama, 1-8, 1989, 9, 1997), 7.50.
- See John Stewart Bell, Speakable and Unspeakable in Quantum Mechanics (Cambridge: Cambridge [9]. University, 2004).
- [10]. 'Experimental Test of Bell's Inequalities Using Time-Varying Analyzers', Physical Review Letters, 49/25 (December 1982).
- Henry P Stapp, Mind, Matter and Quantum Mechanics (New York: Springer-Verlag, 2003). [11].
- [12]. The Complete Works of The Swami Vivekananda, 9 vols (Calcutta: AdvaitaAshrama, 1-8, 1989, 9, 1997), 3.269.
- David Bohm, Wholeness and the Implicate Order (London: Routledge&Kegan Paul, 1980). [13].
- Stuart Hameroff and Roger Penrose, 'Orchestrated Objective Reduction of Quantum Coherence in [14]. Microtubules: "Orch OR" Model for Consciousness'; <a href="http://www.quan-">http://www.quan-</a> The tumconsciousness.org/penrose-hameroff/or-chOR .html> accessed 5 November 2013.
- [15]. AmitGoThe Swami, *The Self-Aware Cosmos* (New York: Penguin, 1995).
- The Complete Works of The Swami Vivekananda, 9 vols (Calcutta: AdvaitaAshrama, 1–8, 1989, 9, [16].
- Dewey, John. 1930. Individualism: Old and New Minton, Balch and Company, New York. [17].
- [18]. Dewey, John. 1986. Essays, A Common Faith. The Collected Works of John Dewey, 1882-1953 (Ed.) Jo Ann Boydston, Southern Illinois University Press, Carbondale and Edwardsville
- [19].
- Knight, Philip J. 1998. "John Dewey and the Reality of God," Modern Believing 39, no.1. Romanell, Patrick. "Religion from a Naturalistic Standpoint" in Religion in Philosophical and Cultural [20]. Perspective (Ed.) J C. Feaver& W. Horosz. Affiliated East-West Press, New Delhi.
- Titus, Harold. 1968. Living Issues in Philosophy Eurasia Publishing House, New Delhi [21].
- Vivekananda, The Swami. 1970. Karma Yoga & Bhakti Yoga, Ramkrishna-Vivekananda Center, New [22]. York.
- Vivekananda, The Swami. 1998. A Study of Religion, AdvaitaAshrama, Calcutta. [23].
- Bandyopadhyay, P. K., Proc. IEEE, 1998, 86, 259-285. [24].
- [25]. Dwivedi, B. N., Hindustan Times, 31 October 2013.
- [26]. Educational ideas of The Swami Vivekananda, www.edusparx.com.
- [27]. Emerson, T. D., IEEE Trans. Microwave Theory Techn., 1997, 45, 2267–2273.
- Purkait, B.R. (2011). Great Educators and Their Philosophies, New Central Book Agency (P)Ltd., [28].
- [29]. Ramakrishnan, T. V., preprint.2014, PP-27-28.
- [30]. Response to wireless stimulation in Life Movements in Plants, Bose Research Institute, Calcutta, 1919, pp. 418-424.
- Ruhela, S.P. & Nayak, R.K. (2011). Philosophical & Sociological Foundations of Education, Agrawal [31]. publication, Agra.
- Sharma, Ram Nath (2010). Textbook of educational philosophy, kanishka publishers, Distribution, New [32]. Delhi 110002, PP-277-284.
- Albert Einstein, Science, Philosophy and Religion: A Symposium (New York: The Journal of [33]. Philosophy, 1941).
- Complete Works, 7.50. [34].
- See John Stewart Bell, Speakable and Unspeakable in Quantum Mechanics (Cambridge: Cambridge [35]. University, 2004).
- [36]. 'Experimental Test of Bell's Inequalities Using Time-Varying Analyzers', Physical Review Letters, 49/25 (December 1982).

- [37]. Henry P Stapp, Mind, Matter and Quantum Mechanics (New York: Springer-Verlag, 2003).
- [38]. Complete Works, 3.269.
- [39]. David Bohm, Wholeness and the Implicate Order (London: Routledge&Kegan Paul, 1980).
- [40]. Stuart Hameroff and Roger Penrose, 'Orchestrated Objective Reduction of Quantum Coherence in Brain Microtubules: The "Orch OR" Model for Consciousness';<a href="http://www.quantumconsciousness.org/penrose-hameroff/or-chOR">http://www.quantumconsciousness.org/penrose-hameroff/or-chOR</a> .html> accessed 5 November 2013.
- [41]. AmitGoThe Swami, The Self-Aware Cosmos (New York: Penguin, 1995).
- [42]. Complete Works, 2.231
- [43]. Religion and Science, the Complete Works of The Swami Vivekananda, AdvaitaAshrama, Calcutta, 1999, Vol. VI, pp. 81-82.
- [44]. The Complete Works of The Swami Vivekananda, volume ii, p360.
- [45]. Vivekananda, S. A Study of Religion, Advaita Ashrama, Kolkata, 2004 pp. 87-88
- [46]. Vivekananda, The Swami (2007). ShikshaPrasanga, UdbodhanKarjalaya, Kolkata,
- [47]. www.belurmath.org/The Swamivivekananda.html
- [48]. www.The Swamivivekanandaquotesgarden.blogspot.in
- [49]. www.encyclopedia.com
- [50]. www.slideshare.net
- [51]. www.esamskrit.com
- [52]. A Bouquet of The Swami Vivekananda's Writings (2013), handwritten works of The Swami Vivekananda
- [53]. Vedanta Philosophy: An address before the Graduate Philosophical Society (first published 1896)

