

The Outside, The Inside, and The Beyond:
Glimpses of Swamiji's View

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The Outside

‘We have resolved the whole universe into two components, into what are called matter and energy, or what the ancient philosophers of India called Akasha and Prana. The next step is to resolve this Akasha and the Prana into their origin.’ [*Complete Works of Swami Vivekananda, Vol.2, p.265*]

‘Science today is telling us that all things are but the manifestation of one energy which is the sum total of everything which exists....’ [*CW, Vol.2, p.140-141*]

Swamiji threw this challenge to modern physics when it was yet in the lap of future, and that challenge was taken up by Professor Nikola Tesla, one of the greatest scientists in the field of electricity. Tesla used to attend his lectures in America. In a letter Swamiji wrote to Mr. E. T. Sturdy on 13 February 1896, ‘Mr. Tesla was charmed to hear about the Vedantic Prana and Akasha and the Kalpas, which according to him are the only theories modern science can entertain.... Mr. Tesla thinks he can demonstrate mathematically that force and matter are reducible to potential energy. I am to go and see him next week, to get this new mathematical demonstration.... I clearly see their perfect unison with modern science, and the elucidation of the one will be followed by that of the other.’ [*CW, Vol.5, p.101-102*]

Prof Tesla did not succeed. But the answer to the challenge came forth three years after the passing away of the Swami (1902). In 1905 Albert Einstein published his Special Theory of Relativity. The theory proved, among other things, that energy and matter are really two forms of the same thing. So, either one can be transformed into the other. That was one of the greatest strides that gave birth to modern physics.

While developing this idea Einstein did away with a long cherished hypothesis of physics, that a solid, undetectable thing called ether fills all space and acts as a medium for the propagation of light. He considered it as an unnecessary assumption. Interestingly, in 1895 in an article on physics that appeared in a prestigious journal of America, Swami Vivekananda speculated, ‘But on all suppositions, there must be space between two particles of ether, however small; and what fills this inter ethereal space?... Thus the theory of ether, or material particles in space, cannot account for space itself.’ And there he raised the issue of explaining *space*. [*CW, Vol.9, p.288-289*]

Elsewhere he said,

‘The one peculiar attribute we find in time, space, and causation is that they cannot exist separate from other things. Try to think of space without colour, or limits, or any connection with the things around – just abstract space. You cannot; you have to think of it as

the space between two limits or between three objects. It has to be connected with some object to have any existence. So with time; you cannot have any idea of abstract time, but you have to take two events, one preceding and the other succeeding, and join the two events by the idea of succession. Time depends on two events, just as space has to be related to outside objects. And the idea of causation is inseparable from time and space. *This is the peculiar thing about them having no independent existence.* They have not even the existence which the chair or the wall has. They are as shadows around everything which you cannot catch. They have no real existence; yet they are not non-existent, seeing that through them all things are manifesting as this universe. Thus we see, first, that the combination of time, space, and causation has neither existence nor non-existence. Secondly, it sometimes vanishes. To give an illustration, there is a wave on the ocean. *The wave is the same as the ocean certainly, and yet we know it is a wave, and as such different from the ocean.* What makes this difference? The name and the form; that is, the idea in the mind and the form. Now, *can we think of a wave-form as something separate from the ocean?* Certainly not. It is always associated with the ocean idea. If the wave subsides, the form vanishes in a moment, and yet the form was not a delusion.’ [C.W., Vol. 2, p. 135-136] (Emphasis added)

This wonderful observation was made when Physics was yet to talk about space-time continuum and explain matter as curvatures of space-time. Of what constitutes the basic concepts of science, his idea was as clear as it was modern:

‘It is plain that these notions of matter or force, time or space, causation, law, or mind, are held to be units abstracted and independent (by themselves) of the groups, and that it is only when they are thought of as such, they furnish themselves as explanations of the facts in sense-perception. That is to say, apart from the validity of these notions, we see two facts about them – first, they are metaphysical; second, that only as metaphysical do they explain the physical and not otherwise.’ [CW, Vol.4, p.378]

In the twentieth century it was proved that subatomic particles (that constitute all matter) have dual nature: they have particle-like as well as wave-like nature. Nothing specific can be said about their real nature. For example, the physical phenomenon called photo-electricity exhibits the particle-like behaviour of light (and Einstein was awarded with the Nobel Prize for this discovery), while the wave nature of light explains another phenomenon called interference. The same is true for electrons, which flow to cause electric current. Here one is reminded of Swamiji’s speculation in 1896 (before electron was discovered) on ‘a condition in which the Prana (energy) is almost inseparable from Akasha (matter), and *you can hardly tell whether Electricity is force or matter.*’ [CW, Vol.5, p.102](Emphasis added)

These vague, tiny things make all the great galaxies of stars and nebulae through an immense expanse of the universe! How did all these come into existence? The Big Bang theory is still the most popular idea of creation. To describe it in a simple way, the universe came into being from a state called singularity – something where there is neither space nor time. All on a sudden time and space came into being and equilibrium was broken and thus our universe was born some 15 billion years ago – nobody knows how – and it went on growing into what it is now. One may be astonished to find how Swami Vivekananda explained *Samkhya* and *Vedanta* in this respect. The manifested universe, he said, came out of an *unmanifested* state and would possibly go back into such a state. In his own words,

‘It is not that this world was created the other day, not that a God came and created the world and since that time has been sleeping; for that cannot be. The creative energy is still going on.... Our Sanskrit word for creation, properly translated, should be projection and not creation. ... The whole of this nature exists, it becomes finer, subsides; and then after a period

of rest, as it were, the whole thing is again projected forward... only again to break into pieces, to become finer and finer, until the whole thing subsides, and again comes out. Thus it goes on backwards and forwards with a wave-like motion throughout eternity. Time, space, and causation are all within this nature. To say, therefore, that it had a beginning is utter nonsense. No question can occur as to its beginning or its end.' [CW, Vol.3, p.122-123]

Now there are similar scientific ideas under investigation: Cyclic models, oscillatory universe model, etc. His logic was based on the simple, self-evident fact that something cannot come out of nothing. 'But evolution must be brought in accordance with the more exact science of Physics,' he said, 'which can demonstrate that every evolution must be preceded by an involution.' [CW, Vol.8, p.363] He rejected the conjecture that there is a First Cause or Creator of the universe. The universe was to him eternal – without a beginning and without an end. It is not created by God; it is an aspect of God. To realize that is the highest knowledge.

How correct is our knowledge about the nature around us and the laws governing it? Swami Vivekananda's idea of knowledge and of natural laws was the same as was to be found at the basis of Quantum Physics decades later: What we see depends on how we see. Change the observer and the world will change. He said,

'Then that which is really outside of us is not what we see. The glass that I see is not the external object certainly. That external something which is the glass I do not know and will never know. Something produces an impression upon me. Immediately I send the reaction towards that, and the glass is the result of the combination of these two. Action from outside – X. Action from inside – Y. The glass is XY. When you look at X, call it external world – at Y, internal world.' [CW, Vol.4, p.228]

So, it was justly Swamiji's conviction: 'Science and religion will meet and shake hands. Poetry and philosophy will become friends. This will be the religion of the future, and if we can work it out, we may be sure that it will be for all times and peoples. This is the one way that will prove acceptable to modern science, for it has almost come to it.' [CW, Vol.2, p.140]

The Inside

The brain-mind complex is manufacturing everything – starting from this three dimensional world (as we perceive it, whatever be the number of dimensions for the Physicists!) to all thoughts and emotions like fear, liking, and so on. What the mind is and what its relationship with brain is, nobody knows for certain. But we know its functions: it takes signals from outside and processes them and the outcome is all that we know, think, feel, analyse, determine, will, imagine, dream. What is coming from the outside to our inside? – The stimuli which science interprets as electrochemical signals coming to the brain through neurons. Suppose we see something. What happens? Light (that is, a series of zero-mass, discrete particles called photons with various energy contents or, you may say, electromagnetic waves of corresponding frequencies) impacts on the retina of our eyes, and immediately those electrochemical signals are set out toward the brain. The brain-mind complex seems to take these as the raw materials to manufacture all that we see, nobody knows how. And this is projected as the outside view. In the words of Swamiji,

‘It was only the other day that Western philosophers have come to know that the eyes are not the real organs of vision, but that behind these are other organs, the *Indriyas* (centres in the brain responsible for sense perception), and if these are destroyed, a man may have a thousand eyes, like Indra, but there will be no sight for him. Ay, your philosophy starts with this assumption that by vision is not meant the external vision. The real vision belongs to the internal organs, the brain-centres inside.’ [CW, Vol.3, p. 401-402]

When I read a book, I see certain black lines and curves printed on a paper. I associate them with some *ideas* in the mind and make out a *meaning*. Similarly, there is no sound or meaning outside. Nothing but vibration comes in via air and ear, and the sound we hear is produced inside. I have learnt to automatically associate some *ideas* with some of these sounds, so I can find a meaning of what someone says. So, all perceptions and conceptions are actually mental constructs, but they depend on the nature of inputs and the intermediary physiological processes. We can become aware of the functions of the mind by turning the mind inward – towards itself.

Research on neurosciences has made great strides in recent years. It puts an end to any doubt about the superiority of human brain. Evolution of the frontal lobe has aroused immense possibilities for the workings of the mind, and human society is yet to explore them adequately. The prefrontal cortex is supposed to support higher functions of the mind like discrimination between right and wrong and controlling the animal impulses (that are associated with the lower parts of the brain developed during pre-human stages of evolution). This may in future provide a physiological basis for *viveka* that appears on the human level only and opens up for man the gate to his true, divine nature. Poet king Bhartrihari sang long back: ‘*Dharmaiva teshām adhiko vishesho, dharmena hināh pashubhih samānāh*’.

The materialist argues that the mind is nothing but the brain. The brain has billions of neurons with thousands of synapses each, which are made of inert matter, of course, of the physical world. Many scientists adhere to this school of thought. Thus a general misconception has captured the modern man that it is a conclusion of science. It is not. Let us listen to the Nobel laureate neurologist, Sir Charles Sherrington:

‘Knowledge of the physical basis of mind is making great strides in these days. Knowledge of the brain is growing, and our theme is almost equivalent to the physiology of the brain. *Mind, meaning by that thoughts, memories, feelings, reasoning, and so on, is difficult to bring into the class of physical things.* Physiology, a natural science, tends to be silent about all outside the physical. And so the study of the physical basis of mind suffers from falling between two stools.’ [Introductory to *The Physical Basis of Mind* by George Henry Lewes, p.1] (Emphasis added)

Dr Wilder Penfield, an eminent neurosurgeon and a student of Sir Sherrington, said,

‘During brain action, a neurophysiologist can surmise where the conduction of potentials is being carried out and its pattern. It is not so in the case of what we have come to call mind-action. And yet the mind seems to act independently of the brain in the same sense that a programmer acts independently of his computer, however much he may depend upon the action of that computer for certain purposes.’ [The *Mystery of the Mind: A Critical Study of Consciousness and the Human Brain*]

Let us listen to Swami Vivekananda on the issue of mind and matter,

‘Whether the external conforms to the internal, or the internal to the external, whether matter conforms to mind, or mind to matter, whether the surroundings mould the mind, or the mind moulds the circumstances, is old, old question, and is still today as new and vigorous as it ever was. Apart from the question of precedence or causation – without trying to solve the problem as to whether the mind is the cause of matter or matter the cause of mind – it is evident that whether the external was formed by the internal or not, it must conform itself to the internal for us to be able to know it. Supposing that the external world is the cause of the internal, yet we shall have to admit that the external world, as cause of our mind, is unknown and unknowable, because the mind can only know that much or that view of the external which conforms to or is a reflection of its own nature. That which is its own reflection could not have been its cause. Now that view of the whole mass of existence, which is cut off by mind and known, certainly cannot be the cause of mind, as its very existence is known in and through the mind.’ [CW, Vol.4, p.378-379]

It may be mentioned here that the stalwarts of Quantum Physics were to introduce this concept, without any alteration, as their basic premises to scientific enquiry into and explanation of the external world. They have also declared with certainty that matter is not only unknown, it is *unknowable*. Science has recognized in the last century that the world is a dance of properties mathematically defined that are ascribed to *concepts* like energy-waves, particles, and so on and so forth for satisfactory explanation of observed phenomena.

Swami Vivekananda continued,

‘Thus it is impossible to deduce a mind from matter. Nay, it is absurd. Because on the very face of it that portion of existence which is bereft of the qualities of thought and life and endowed with the quality of externality is called matter, and that portion which is bereft of externality and endowed with the qualities of thought and life is called mind. Now to prove matter from mind, or mind from matter, is to deduce from each the very qualities we have taken away from each; and, therefore, all the fight about the causality of mind or matter is merely a word puzzle and nothing more.... That is to say, one party wants to explain the whole universe by a portion of it which is external, the other by another portion which is internal. Both of these attempts are impossible. Mind and matter cannot explain each other. The only explanation is to be sought for in something which will embrace both matter and mind.

‘It may be argued that thought cannot exist without mind, for supposing there was a time when there was no thought, matter, as we know it, certainly could not have existed. On the other hand, it may be said that knowledge being impossible without experience, and experience presupposing the external world, the existence of mind, as we know it, is impossible without the existence of matter.’ [C.W., Vol.4, p.379-380]

The Beyond

Whatever is there inside or outside us is a part of nature and follow natural laws – physical or psychological. So, in that sense, all these are material things. There is something in living beings which separates them from the material things: the awareness of existence, the tendency for self-preservation. For instance, I know that I exist and must struggle to live for ever. Even an amoeba is aware that it exists and struggles to preserve its life. But a table is apparently not aware of its own existence, so it cannot strive to exist for ever. These unique features of life cannot come from nature, they must be coming from some unknown source.

And that source must be beyond nature (as we know it), but manifesting itself in it. To describe this non-nature essence of beings, beyond the changing combinations called body and mind, the greatest Indian thinkers and seers used the word, the *Ātman*.

What is it? In answer they said: It is not like anything we find in nature; so it is outside the limits of logic and comparison; it cannot be a subject of knowledge. When we realize *Ātman*, we become That. No, they say, we are already That, only our identification with nature ceases, we are no more a bundle of flesh and bones, thoughts and emotions. Then how do we understand something with our intelligence? Unless I can grasp something, how shall I work with the idea? The Buddha was silent to this question. He said, Follow the prescribed methods and realize the Truth for yourself. But the *Vedānta* tried to indicate, y way of inference, pointing to the nearest approach to Truth, that human intellect can grasp: It is *sat* (real existence: hence comes the tendency for self-preservation or immortality), *chit* (real awareness: hence comes consciousness and the search for knowledge), and *ānanda* (real bliss: hence comes all search after happiness). In and through the eternal flux of nature, this is the only real, changeless substance – the *Brahman*. In living beings, it manifests as the *Ātman*. Its manifestation is more in the beings that are higher on the scale of evolution. It is the Real Man behind the apparent man.

In a lecture in Lahore in 1897, Swami Vivekananda said,

‘In modern times, in Western countries, as physical science is making rapid progress, as physiology is step by step conquering stronghold after stronghold of old religions, the Western people do not know where to stand, because to their great despair, modern physiology at every step has identified the mind with the brain. But we in India have known that always... the mind is matter, only finer. The body is gross, and behind the body is what we call the *Sukshma Sharira*, the fine body, or mind. This is also material, only finer; and it is not the *Atman*... This *Atman* is the real man behind. It is the *Atman* that uses the material mind as its instrument, its *Antahkarana*, as is the psychological term for the mind. And the mind by means of a series of internal organs works the visible organs of the body.’ [C.W., Vol.3, p. 401]

Even the ego (the sense of agency associated with the functions of the mind) – ‘I am Mr So-and-so, I am doing this and that’ – is a product of identification of the self with what it witnesses: the body-mind complex. So, it must be an error, it cannot be our real self. Think of the paradox: I think, ‘I am the body’. And I know the body will die. But I have the instinct for self-preservation. In other words, I must strive to attain immortality. Such are the contradictions we have to live with, until we attain to the highest Truth, the *Ātman*. The more we move towards It, the more we forget our little ego and become one with all. It fills us with Love, for the One is the essence of all.

The self-effulgent Truth *within the within* is the real Self of all, is everywhere, nay, it is also beyond all. Says the Shvetāshvataropanishad (6.11), ‘*Eko devah sarvabhuteshu gudhah sarvavyāpi sarvabhutāntarātmā*’ – One Divinity is hidden in all beings, It pervades all, It is the real self of all beings. In the same breath they say that It is also ‘*karmādhyaksha sarvabhutādhivāsah sākshi chetā kevalo nirgunashcha*’ – residing in all beings, It presides over all actions, as it were, as the non-acting witness of what goes on in the mind (that is, all the scenes of the inside and the outside). It is the Principle of Awareness, the One without a second, and devoid of all qualities (that is, beyond nature).

In Swamiji's words, 'He is the Witness, the eternal Witness of all knowledge. Whatever we know we have to know in and through Him. He is the Essence of our own Self. He is the Essence of this ego, this I and we cannot know anything excepting in and through that I.' (Here Swamiji personalized the Impersonal Truth just as a mode of expression in language.) [C.W., Vol. 2, p. 133] This Principle of Awareness has to be recognized and distinguished from the X's and Y's for a fuller understanding of the scope and possibilities of life. And only our species, the *homo sapiens sapiens*, can do it. That is what constituted Swami Vivekananda's mission. He said, 'My ideal indeed can be put into a few words and that is: to preach unto mankind their divinity, and how to make it manifest in every movement of life.' [C.W., Vol. 7, p. 501]