

Vedantic Conception of the Origin of Life

By: Dr. Michael Marchetti (Bhakti Madhava Puri Swami)

The first aphorism of Vedanta-sutra states that we must inquire into our true nature as spirit (atatho brahma jijnasa). Vedanta-sutra advises that such inquiry must be taken up under the guidance of someone who is qualified in realized spiritual knowledge. Spiritual reality is qualitatively different from material existence. Material existence is explained in the Bhagavad-gita as being inferior (apara) to the energy of the living entity, while spiritual reality is superior (para). Thus an exploitive mood can only be applied to the material realm of existence, while a mood of dedication and service is required to enter into realization of what is spiritual. With proper guidance from one who is surrendered to that higher nature we may make progress in our own spiritual life, otherwise, we may not be able to understand and realize our own genuine existence.

How shall we begin the inquiry into spirit?

The first hint of how to begin our inquiry is given in the second aphorism of Vedanta-sutra. Janmadasya yatah. Janma means birth, and asya refers to all that has been created from Brahman or the original source - which is spirit. Brahman means Spirit or God. It is not a matter of merely knowing what is immediately present before us. We want to know where it all comes from. This is actually very practical if we want to properly understand anything.

For example, let us say an aboriginal villager enters a city for the first time in his life and sees numerous skyscraper buildings. He may think these buildings to be natural features of the environment, just like the caves in his mountain village. Thus, in order to properly understand what a building is, not only its present appearance but how it got there, or where it came from is necessary. Only then can one say that he has properly understood what a building is.

Likewise, scientists are not merely interested in observing the world, they want to understand what is beyond its immediate appearance, and comprehend what principle constituents it comes from - what has made or caused it to be what we observe. This is what we mean by scientific understanding.

In this sense, whatever we observe, all that appears to our senses, has a source beyond itself which is superior to it, i.e. upon which it is dependent or has its support. Thus inquiry into the source or birth of things automatically orients us towards seeking what is superior to that which we immediately observe. However, when we want to inquire into the source of the self, we cannot expect to relate it to a merely material element. As conscious beings we must search for a conscious source, or spiritual origin upon which our whole existence is dependent. Thus the Srimad Bhagavatam, which is considered the natural commentary on Vedanta-sutra, instructs us in its very first aphorism - janmadasya yatha...abhijna svarat - that the source of creation and all creatures is a supremely independent cognizant being, or God.

Order, organization and form

Another feature is necessary for full comprehension of things. For example, a house is made of bricks, wood, etc. These are its material constituents. But there is another element essential to the house that is

not included in its material constituents. The form of the house does not arise merely out of its constituents. There is nothing intrinsic to bricks and wood that requires them to take the form of a house. Those same materials can be found in many structures, such as bridges, walls, or even a heap of bricks, without necessarily forming a house. So the cause or necessity from which the form of the house arises must also be an essential part of scientific knowledge.

Ordinarily people may not make this type of exacting scientific inquiry into things. Generally, most simply accept things as they experience them and then utilize them in various ways for their own satisfaction, protection, etc. This type of fruitive utilization of things to fulfill some mundane purpose is not conducive to the type of scientific inquiry that the Vedanta-sutra advises us to take up. Thus we see that some acharyas (spiritual teachers) comment that one must first transcend the pursuit of fruitive activities before becoming ready to study Vedanta-sutra for understanding the truth as Spirit.

We find that even for those who are only interested in the exploitation of the resources of material nature for their own enjoyment, it is valuable to understand the cause of things, so that they may make even better use of them for their own purposes. This means that inquiry (jnana) for the purpose of increasing ones enjoyment of material resources (karma) is a disqualification for understanding Brahman. Spirit must be realized only in the mood of dedication and service (bhakti). This is because spirit is of superior nature to ourselves, and by its own intrinsic nature cannot be utilized for our own exploitation. Rather, Spirit is that which constitutes and controls us due to its higher nature as our originating source.

In this way, the properly informed student should want to understand what Spirit is in and for itself, for its own sake - truth for the sake of truth, wherever it may lead him. This kind of complete surrender to the truth for its own sake is necessary for making proper inquiry into spirit or ultimate reality.

The limits of sense experience

Observation of nature involves the senses: seeing, hearing, feeling, etc. However, sense experience is not sufficient for developing scientific knowledge. We may think that only when something can be verified by direct experience of our senses (or our scientific instruments, which are extensions of our senses) - only then do we accept it as being scientifically verifiable as real. But there is another non-sensual element, beyond the purview of the senses that is essential for scientific knowledge.

For example, we experience a certain number of objects or events. These provide the data that we collect from observation of nature or from our experiments in the lab. But beyond the data or observations another element is needed to connect the data or events into a cohesive unity or systematic conception. If the connection proves to be a necessary one for uniting several events then that necessity or connection is called a law.

A new element has been introduced here because there is no sense that detects necessity. We only have senses for seeing, hearing, feeling, tasting and smelling. Then how do we determine necessity? For that we have to invoke what is sometimes called the sixth sense, or the mind. Only by mind or understanding can we form the concept of necessity or law connecting events.

Reason is what we call the logical necessity that connects thoughts or concepts in the mind. One thought follows another because (and we emphasize here the word "because") of the logic involved in rational thinking. For example, the logical syllogism involves a major and minor premise from which the conclusion follows of necessity. Thus, given the major premise that 'all men are mortal,' and the minor premise that 'Socrates is a man,' we must draw the necessary logical conclusion that, 'therefore, Socrates is mortal.'

Given the major and minor premise, we feel an inner necessity that forces us to arrive at a specific conclusion. This inner force of necessity is called reason. But it is a logical or rational force, not something that exists for the senses. However, this does not mean that we cannot experience it or that it does not really exist. For example, the force we call gravity is a concept that we think of as being an actual existing force in the universe. It connects various events or phenomena that we experience with our senses even though we cannot detect gravity itself with our senses. So concepts of the mind may have actual existence, even if we don't or can't have sensual experience of them.

Just as logical cause or necessity exists as reason, so too we assume that physical or causal necessity exists in nature, which we call force. Thus we say that static electricity (electrical force) may be caused by rubbing wool over a rubber rod; or water in a pot boils by holding it over a fire. In each case we have a physical cause producing a physical effect. We don't sensuously perceive the actual cause that connects one event with another; we formulate the connection of cause and effect in our mind. David Hume was the famous English philosopher who presented strong arguments about this non sensuous aspect of the idea of causality, and claimed that all we could legitimately affirm is that what we call causality is merely a habit of mind that we invoke every time we relate two experienced events.

The question may arise, if relationships are mentally based, then to what extent are the events or objects of sense experience likewise based on mind?

Here again, two aspects of an object are to be discerned. Firstly, "that" an object exists (its being), constitutes one aspect of an object; secondly "what" an object is, or its quality, constitutes its other aspect. It may come as a surprise to most that one aspect is a product of mind, the other of the senses. The qualities of an object of experience or observation, belong to its phenomenal appearance. Phenomena are what we experience through the senses. But the ontological being of the object in itself is not something we ever experience with our senses. In modern times it was Immanuel Kant, the famous German philosopher, who made clear this distinction between the thing-in-itself and its phenomenal appearance in sense-perception.

We only experience how something appears to us. Because we know that all appearances require that there must be something that appears, that noumenal something is logically deduced or thought but not sensuously experienced. Thus every object or event is itself something that is both thought and sensed, or what we may conclude is a combination of both mental and physical aspects.

Mind is essential to the function of the senses

Looking at a simple drawing of a Necker cube, for example, immediately demonstrates how thought and senses are interlaced. What is seen with the eyes depends on the particular interpretation or perspective one has of the drawing. The mental and sensual functions cooperate to produce what is

seen. Another example can be taken from the study of robotics. A robot may be fitted with servo-motor mechanisms that function according to input from sensors – transducers, photo-electric devices, etc. The input from the sensors (senses) must first be interpreted through a computer (mind) that is pre-programmed to channel the input properly according to what the robot is designed to do upon such sensorial input.

Further inquiries of this type can lead to deeper insights into what quality is. Eventually, we will be led to what is essentially mind or reason at the base of all reality. But that seems to contradict everything that we ordinarily consider to be real. The mental world is generally referred to what we call ideality, not reality. But is the conclusion we have arrived at really contrary to the way we ordinarily understand reality?

Consider the fact that practically every educated person today thinks that the Sun is stationary and the planets revolve around it. However, this idea completely contradicts what we daily observe with our eyes. Yet no one calls a person who believes in the heliocentric system an idealist, despite the fact that it is a purely mental or rational concept as opposed to the direct experience of our senses for which the Sun definitely seems to move in the sky.

Modern science is completely enamored by the atomic theory of matter, but we do not experience atoms or electrons with our senses, or even under our microscopes. Electrons are so small they can never be observed, and like photons that are without mass they can only be inferred indirectly from whatever macroscopic observations we can make. As Sir Aruthur Eddington, a famous scientist-philosopher, once said, “Something unknown is doing what we don't know. That is what our theory of the electron amounts to.” Thus, the whole atomic theory is based on concepts or theoretical entities that we intellectually presuppose to exist at the foundation of our observations, yet are themselves never directly observed.

Electromagnetic fields cover a wide spectrum of which only a very small segment is observable by the eye. The portions of both higher and lower frequencies beyond the visible spectrum can only be inferred (a logical procedure) by observing effects they have on visible matter. The power of theory or ideas is thus ubiquitous in modern science, and throughout we find a combination of mental and sensual elements combined in a harmonious and non-conflicting way.

Yet scientists who adhere to a strictly materialist interpretation of reality are often reluctant to acknowledge the essential importance of thought or mind in the scientific understanding of the constitution of reality. Thus Vedanta-sutra encourages us to dive deeply into reality, to seek the origin or birthplace of whatever we experience in our environment. When we reach the place that is beyond the merely material region, there the domain of spirit is to be found.

Just as we discovered that mental and sensual reality are combined in our scientific understanding of reality, so too we will find that comprehended and uncomprehended reality coexists at every point of our knowing. All that can be measured is but a small portion of total reality that encompasses all that can not be measured. All that is under our knowledge and control is a very small region within all that is unknown and beyond our control. As Sir Issac Newton once commented, “I merely have found] a smoother pebble or prettier shell than ordinary, whilst the great ocean of truth lies undiscovered before me.”

For example, quantum mechanics in principle puts limits on very small measurements – this is called

the Heisenberg Uncertainty Principle. The size of the universe is limited by what we can detect with our instruments. Those regions of the universe that may have already exceeded distances from which light could possibly travel to reach us at the present time, will be beyond our measurement. Finally, there is always an error in even the most ordinary measurements, beyond which we cannot improve. This means that all measurements are accompanied by a region beyond measurement. And ultimately, all units of measurement are relative, established with respect to some arbitrarily chosen standard, implying that we have no absolute knowledge of what distance, or time or mass, etc. may actually be besides concepts.

The undiscovered ocean of truth is "ether" even if we may not know what it is that is "ether," so certainly it must effect us. We may not know how we are digesting food, but that does not stop digestion from happening. We may not know how our hair is growing out of our head, but that does not prevent it from growing. Many things are going on despite our ignorance of them, but nonetheless they are effecting us. So too, Spirit may remain unknown to us, but that does not diminish its reality or its essential effect in our lives.

Is it reasonable to ignore that which we cannot control or comprehend, especially if it forms the major part of the total reality? It is not only the realization of the limits of sense experience, but the limitations of our power of inquiry that is essential for recognizing the spiritual side of reality. In other words, what we are claiming is that ordinary knowing is not sufficient for entering the sphere of spirit since it lies beyond what we know through measurement and analysis. We can know that such a sphere exists, just from the recognition of the various limits as well as mental elements that we have mentioned here. But really, one must go beyond knowledge to what is called faith in order to properly enter the world of spirit. Faith is not an absence of knowledge, but it is a different kind of knowledge of being that extends beyond limited finite experience.

One who understands this must necessarily realize that a very different approach is required in order to genuinely enter the spiritual region, the realm of reality in which everything is superior to our frail capacities, and to our finite subjective comprehension. This is the region that we call the Absolute or Ultimate Reality. Knowing in that region takes on a completely different form, and involves a totally different method than is used by empirical science, yet it is not unreasonable or unscientific.

We can call knowledge of the spiritual realm transcendental knowledge because it transcends empirical knowledge. Just as training and skills are necessary for becoming expert in empirical fields of knowledge such as quantum mechanics, or rocket science, or even plumbing or shoe-making, so too specialized training and development are required if one wants to progress deeply into the world of faith and its more intimate determinate variety.

[Presented by Prof. Carlos Rocha (Mathematician from Venezuela), on behalf of Dr. Michael Marchetti (Bhakti Madhava Puri Swami, Ph.D., from USA) at the International Conference on Science and Spirituality for World Peace held at the RIMS Jubilee Hall in Imphal on November 23-24, 2007]