SCIENCE OF THE SOUL: – AN EXPLANATION FROM BHAGAVAD-GITA
by
Srila Bhakti Raksak Sridhar Dev-Goswami Maharaja

indriyani parany ahur indriyebhyah param manah
manasas tu para buddhir yo buddheh paratas tu sah

Translation: It is said by the wise that the senses are superior to matter, the mind is superior to the senses, and the intelligence is superior to the mind; and the soul is superior to even the intelligence. (Bhagavad-gita: 3.42)

Soul is nearby. We can try to find out what the soul is if we can eliminate the material elements. This is the process of the Upanisads and is mentioned in the Bhagavad-gita: indriyani parany ahur. First we are to understand that our senses are primary. If my senses are removed, the entire world of our experience is nothing to me. Only through my senses can I be aware of the existence of the outside world. Minus senses, eyes, ears, no world is apparent to me.

Then, above the senses is the mind. What is the mind? The mind deals with acceptance and rejection: sankalpa vikalpa. In other words, the mind thinks, “I want this, I don’t want that.” It deals with attachment and hatred. The mind determines who is enemy and who is friend, this is mine, that’s yours. If we want to understand the mind we have to look within, to inquire within: what is that element in me that seeks friends and avoids enemies? Where is he? Sometimes the mind is apparent; then other times it is hiding. I must find out where the mind exists, of what substance is it composed? By analysis I can understand what aspect of my inner self is the mind. Then, having some idea of what the mind is, I may analyze that part of me which deals with reason, the intelligence. Where is the intelligence? When the mind demands something; the intelligence says, “Don’t take that, don’t eat that.” By introspection, I may look within and find out: what is that principle in me which reasons? Where is that fine thing? What is its nature, its existence? We shall try in our introspection to find it out, substantially.

If that is possible, then the next step will take us to the soul. What is that soul which makes possible the intelligence, the reason by which we act, which prompts the mind to want, and also gives our senses the power to connect with things? What is that spark of knowledge? Where is that soul within me? What position does it hold? I want to see it face to face. Then in this way we can evaporate like lightning all the misconceptions of body and mind. By finding the soul through introspection, we may experience the lightning touch of realization.
At that time, the whole world will be turned in a diametrically different line, and we shall see things differently: “Oh, this material life is undesirable! These senses are enemies in the garb of friends. If I confront them now, they say that I may have an honorable friendship with them, and that without them I can’t live. But it is all a hoax.” From a realization of the soul, from the point of that wonderful knowledge, one may come to see the ocean of knowledge. One may begin to see what is in the subjective area, and hanker for how to come in connection with that divine realm. At that time, the very trend of one’s life will be changed, and a total change will come in our search, in our standard of prospect in life. And our search will take a concrete shape in devotion. In this way, we must begin our search after the higher sphere. And how to enter there?

In brief, four stages of mundane elements in the middle are given here. First is matter, second is the senses, third is mind and fourth is judiciousness or reason. Finally, there is the soul. But in more elaborate detail, there are also seven subdivisions of Bhur, etc., up to Satya-loka. In this line, the soul is found in Brahman. Paratatas tu sah. The word sah refers to Brahman. Matter may also be subdivided as stone, water, heat, gas, ether, etc. In one word it is matter, but one will also find subdivision of matter from gross to subtle. In stone one will find earth, coal, wood, maybe gold or silver. But all these elements are felt by the senses, and thus the senses are superior to all the gradations of matter. Then there is the faculty of thinking or impulse: ‘I want this, I don’t want that.’ But further, the faculty of judiciousness, reason or intelligence is superior: ‘No, don’t want that, it will produce a certain bad effect in you’; and so on. Even more subtle than the intelligence is citta (consciousness), which is not mentioned in Gita; further is ahankara (ego), and finally the realm of soul.

Lust is not easily accessible, but is hidden. We cannot easily trace where he lives, but he comes suddenly and, after looting, disappears. But we are told here that really he lives in the intelligence, the mind and the senses. To conquer that lust we are to analyse what is the intrinsic position of the senses, which are like so many doors, are useless. After that we are to try to find out what is the background of that faculty of reason, of judgement and of decision making. In the background is a pencil-thin ray whose nature is diametrically opposite to the world of experience. In Srimad-Bhagavatam an example is given that in the night a cloud may cover the moon. Though the cloud obscures the moon, still the cloud can only be seen by the light of the moon.

In this example the soul is likened to the moon and the ahankara is likened to cloud cover. The sense-consciousness, the mind and the intelligence have all combined to form a system, ahankara, which has covered the soul. But they are seen, and it is possible for them to act, only because there is light—the light of the soul, the moon. So by the help of our reason we must try to perceive what is above reason, and we shall come to see that it is the atma, the soul.

The compiler of the Vedas, Vyasa-deva, says the atma is like that illuminating moon. Or, like the sun: a cloud has covered the sun, but the cloud is seen by the light of the sun. Similarly, the atma is a point of light within us, and because it is in the background we can feel our mental system.

indriyartheshu vairagyaṃ anahankara eva ca janma-mritya-jara-vyadhi-duhkha-doshanudarṣanam

Bhagavat-gita 13.9

The whole world of our experience will vanish one day, with the final wholesale dissolution. It is very difficult to cross the ocean of life and death, birth and death. If you want to escape these troubles, you must take the chance. Otherwise, you will lose so much that it amounts to suicide.

Do you want birth, death, old age and infirmity—or immortality? If you want immortality, you will have to pay for the ticket.
Recently, *New Scientist* came up with top 10 unanswered questions in science about life – “The Mysteries of Life.” These are:

1. How did life begin?
2. How many species are there?
3. Are we still evolving?
4. Why do we sleep?
5. Is intelligence inevitable?
6. What is consciousness?
7. What is sex for?
8. Can we prevent aging?
9. What is life?
10. Is there life on other planets?

Notice the ninth question – “what is life?” It seems such a trivial question. Is it not a surprise? Even with spectacular advancement in various disciplines of science at our hand, we still do not know what life actually is!

We can further add some more questions to the above list:

- What happens to life after physical death?
- What is the implication of the fact that we search for meaning, purpose, morality, truth and so on?
- Is life temporary or eternal? Why do we give importance to religion and the existence of God?

The illustrious *Science* journal also came up last year with 125 questions – ‘What Don’t We Know?’ – the fundamental puzzles that are driving basic scientific research. Some of these are:

- What is the universe made of?
- What is the biological basis of consciousness?
- What is the nature of gravity?

(Scientists are still looking for the first factors that give a relatively uniform ball of cells a head, tail, front, and back in the embryo)

- What determines species diversity?

What Don’t We Know?

- Why is time different from other dimensions?
- Are there smaller building blocks than quarks?
- Can the laws of physics be unified?
- How much can human life span be extended?
- How do planets form?
- What is the origin of homochirality in nature?

(Most biomolecules occur in nature in both mirror-image shapes. Yet in organisms, amino acids are always left-handed, and sugars are always right-handed. The origin of this preference (homochirality) remains a mystery.)

- Are we alone in the universe?
- How and where did life on earth arise?
- How is asymmetry determined in the embryo?

(Scientists are still looking for the first factors that give a relatively uniform ball of cells a head, tail, front, and back in the embryo)

- How do migrating organisms find their way?

(It remains unclear that what guides the migratory birds, butterflies, and whales who make annual journeys of thousands of kilometers)

- Why do we sleep?
- Why do we dream?
- How did cooperative behavior evolve?
- What is the biological basis of addiction?

(The journal presents “Addiction involves the disruption brain’s reward circuitry. But personality traits such as impulsivity and sensation-seeking also play a part in this complex behavior.”)

- Is morality hardwired into the brain?
- What are the limits of learning by machines?
- How much of personality is genetic?
- How many species are there on earth?
- Why does lateral transfer occur in so many species & how?

(“Once considered rare, gene swapping, particularly among microbes, is proving quite common. But why and how genes are so mobile—and the effect on fitness—remains to be determined.”)

- What are the roots of human culture?

(“No animal comes close to having humans’ ability to build on previous discoveries and pass the improvements on. What determines those differences…”)

- What are the evolutionary roots of language and music?
- Do deeper principles underlie quantum uncertainty and nonlocality?

Recently, a major conference was organized by Metanexus Institute at the University of California, Berkeley. The topic for its first day was, “The Ocean of Truth – Exploring the Great Unknowns in Physics and Cosmology.” Twenty Nobel Laureate scientists and other prominent scientists from over the world participated in this historic conference to reflect on the ‘unknowns.’

The foundational questions of understanding ourselves and the universe were once dismissed as metaphysical, spiritual or unanswerable. Yet all have progressively entered into the purview of science. Today they lie at the frontiers of science. It reminds us the words of the well-known quantum physicist Max Born: “the results of the scientific search in which, during several decades, I have taken a small part, … leads unavoidably back to those eternal questions which go under the title of metaphysics.”

Life is a mystery. Even after Darwin’s book, *The Origin of Species* in 1859, the question of life remains unsolved. The best minds in the fields of biology and philosophy have tried from the dawn of civilization and have failed to define life. Scientists still can’t quite put their fingers on exactly what it is that separates a living organism from other types of physical objects.

Over the past three centuries, the ever-increasing success which scientists have experienced in their investigation of gross matter, has led many people to expect that life will eventually be explained solely as an emergent property of matter. At the present time,
nearly all serious attempts to understand the origin of life have been based on this fundamental presupposition, and this controversy is thus being conducted within very narrow limits.

In recent years, scientists of many disciplines, such as chemistry, biology, biochemistry, biophysics, geology, geochemistry, and space science, have devoted considerable attention to the study of the origin of life. Virtually all these studies are based on the assumption that life is an emergent product of matter. Scientists in these areas proclaim that life originated from a random combination of molecules interacting under the influence of blind natural laws over a long span of time. These scientists postulate a primordial chemical soup of small and simple molecules, and they imagine that in the course of time, under the influence of chance and mechanical laws, life generated itself from these molecules.

Such speculations date back at least as far as the time of Darwin, who noted that we could not expect to observe life originating in this way today since already existing living organisms would interfere with the process. He wrote, “It is often said that all the conditions for the first production of a living organism are now present which could, ever have been present. But if (and oh what a big if) we could conceive in some warm little pond with all sorts of ammonia and phosphoric salts, light, heat, electricity, etc., present, that a protein compound was chemically formed, ready to undergo still more complex changes, such matter would at the present day be instantly devoured, or absorbed, which would not have been the case before living creatures were formed.”

In Darwin’s brief description we see nearly all the basic features of the “primordial soup” that serve as the starting point of modern theories of life’s origin. The basic assumption is that living organisms consist of combinations of a few simple chemical compounds. This leads to the hypothesis that simple natural processes may have brought such compounds together under conditions suitable for their combination into more complex forms.

Once this simple initial condition is assumed, the next step is to introduce “chance.” In the words of Jacques Monod: “Chance alone is at the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free but blind, is at the very root of the stupendous edifice of evolution: this central concept of modern biology is no longer one among other possible or even conceivable hypotheses. It is today the sole conceivable hypothesis, the only one that squares with observed and tested fact. And nothing warrants the supposition— or the hope— that on this score our position is likely ever to be revised.”

Chance and the interaction of molecules in accordance with simple physical laws are the only factors admitted as causes of change in modern scientific theories of nature. Although these causes seem inadequate, it is assumed that if a sufficiently long period of time is granted they will be capable of generating life in all its diverse and complex forms. Modern scientific inquiry into the origin of life thus adheres to chemical origin of life.

It is our thesis that this model is based on a fundamental misunderstanding of what life actually is. Before inquiring into the origin of a certain thing, it is essential to understand its fundamental nature. Otherwise, searching for its origin may not be fruitful.

Present scientific knowledge, especially that of physics and chemistry, is unable to fully explain the intricate phenomena associated with life. As the French physicist Louis de Broglie remarked, “It is premature to reduce the vital process to the quite insufficiently developed conception of 19th and even 20th century chemistry and physics.”

**Chemical Origin of Life**

The physical sciences study “gross matter” only, although their results have been extrapolated to explain life. This reductionistic approach, however, has only indicated that present day known physical laws are quite insufficient to account for the features of life. A new paradigm describing life and the laws of nature governing life is needed. We will, therefore, propose an alternative scientific viewpoint which can be termed as Vedantic or Bhagavata paradigm and will discuss the implications of this alternative viewpoint from a general perspective.

**REFERENCES**


EMPIRICALLY INFLUENCED THINKING, PURE RATIONAL THINKING AND ABSOLUTE KNOWING
by
Sripad Bhakti Madhava Puri Maharaja, Ph.D.

Philosophy and the world

If we start out with the assumption that the empirical world is real then we leave philosophy behind from the start. Descartes established the real Copernican revolution in philosophy when he began with “Doubt.” This doubt was directed toward everything familiar including even the world of experience. The only certainty he allowed was the being of himself as thinking. From this he wanted to deduce everything else. This is the spirit of philosophy. If we start with the world as given, then we have not philosophically comprehended what that empiric world is. Genuine philosophy can only begin with doubt. But this doubt must not remain supreme and thereby turn us into skeptics. One must also be willing ultimately to doubt the doubt and in that way arrive at absolute knowledge. Unfortunately, Descartes simply forgot his doubt and uncritically accepted the familiar world of sense as being alongside the being of thought, thus creating a dualism.

Kant presented the idea of critique, i.e. that we should not naively accept the knowledge of the world given to us through our senses. It is only by taking a critical attitude toward our own knowing as such that we come to understand what knowing is and how it contributes to what is known. Again, Kant also uncritically accepted the familiar world of sense as a thing in itself and as totally beyond knowing and therefore as the mysterious source of what is known. Thus he did not overcome the dualism of Descartes.

If philosophy is to comprehend the empirical world in thinking or by rational deduction then necessarily the world must be conceived in its ideality. This ideality means that the world is Appearance or being-for-us. Kant already pointed out that it is only Appearance that we can know. The question then arises what is it the appearance of? Kant implied it was the world in itself that was appearing; yet he did not deduce this in his philosophy. Rather the world or absolute in itself could not be reached by philosophy and therefore nothing in his philosophy could confirm or refute this presupposition.

Hegel pointed out that in saying that the world is being-in-itself or that it is beyond knowledge is already a confession of some type of knowledge about what we supposedly cannot know anything about. Hegel calls “knowing” the being-for-itself of the Absolute, and thus this knowing of the Absolute (or being for itself) is as much a part of the Absolute as its being-in-itself. Thus the Absolute, of which we know only its appearance that we objectively as the world, includes “knowing” as its inherent truth. This means that the Absolute is as much knowing Subject or being-for-itself as it is Substantial being-in-itself. This being-in-and-for-itself of the Absolute is the full comprehension of the Supreme Being or being of the Absolute. Therefore the Absolute is that which knows itself, or it is Spirit.

We may have some difficulty in making this transition from the world of experience to the seemingly ephemeral world of spirit. Again, this ephemerality is only due to lack of familiarity with thinking or reason, as much as it is due to the uncritical acceptance of the reality of the empiric world without philosophical justification.

Hegel points out that practical life works on the principle of the ideality of things since it goes about transforming them [negating them as fixed things in themselves] without much ado. Animals as much as men consume [negate] what is before them as solid being in itself and transform it into being for themselves. It is not therefore unreasonable that philosophy should take the stand that the world is not to be conceived as a fixed being-in-itself but rather as much as being-for-itself.

But then the argument is given that since we start with experience of a particularized world, what reason do we have to leave it behind for the universality of thought? We may consider the fact that we start in Kindergarten with the alphabet — a, b, c... Then
we move on to words, next to sentences, then on to paragraphs and finally to reading or writing books. Ultimately, in the maturity of wisdom we come to know Truth. At the level of Truth the alphabet that we started with is seen as a mere abstraction. It is a moment on the way to Truth. Once Truth is attained then we can in principle express it in any language or any corresponding alphabet for the education of those who are yet to come to Truth. So too the world of particularized experience is the beginning but ultimately is known to be a mere abstraction for Truth itself.

However, this should not be misunderstood to mean that philosophy is unconcerned with reality as some type of mere illusion. It is not reality that is sacrificed, only the confusion regarding what is real. Appearance itself is or has being, but it is to be properly understood what it is that is appearing. Philosophy understands that which is appearing to be not the world as an immediate given, but the Absolute as self-particularizing or self-determining. This can only be shown scientifically by the philosophical development of the concepts involved.

The concrete universal

Proper understanding of the concrete universal is certainly one of the most important elements in comprehending Hegel’s philosophy. We will approach this by briefly considering the two different ways in which the unity of an object is understood by Kant and then by Hegel. A Unity is actually not merely a one without difference, since union implies that two or more things are joined together. In this sense a Unity is a totality. The question is does this unity derive its existence from the combination of its constituent parts, and thus its parts exist independently of their unity, or does the unity exist as a whole and its parts have existence only in relation to the whole?

Of course, as soon as we say “parts” we automatically imply that they are such only in relation to a whole, but if we consider the parts each as wholes themselves then we get into some difficulties. To understand this problem fully will help us to appreciate why Hegel had to reject, on philosophical grounds, the reductionist atomic and evolutionary theories. And it will give us insight into the conceptual nature of his system.

Kant adopts the empiricist tradition by treating objects as composed of separate, sensible intuitions or attributes. The unity of the properties as the object is derived from the synthesis by a subject external to the object. Kant called this contribution of the subject the unity of apperception. By “apperception” he meant a subjective act that is prior to any encounter with objects. The concept of object implies encounter or relationship with a subject. The subject is a unity, Ego, that represents to itself a manifold plurality of intuitions both subjective (thoughts) and objective (sensuous). Thus for Kant the ground for the object was the Ego. Kant held that the substantial unity of the object was an abstraction and was not to be found in the object, as a materialist would conceive the situation. In other words, his idea was that if you take away all the properties of a thing one by one, you would be left with nothing that you could refer to as the substantial ground that unifies the properties as a thing.

The materialistic assumption that there is an underlying substance or ground that unifies the properties of a thing faces the difficulty of explaining what that underlying ground is. Even the smallest of elementary particles must have an ultimate nature itself. Materialism does not address that question, and cannot address that question. So this position is not a properly philosophical one. It is simply a naïve, uncritically accepted assumption. Unfortunately, this is the basis upon which modern science developed and it did eventually lead to many unresolved problems as we find in quantum physics. Science thinks it can solve the problems of philosophy simply by ignoring them, but it cannot - those problems will come back to haunt them because reason will not remain satisfied until it finds itself.

It is because of the unity of the object in the transcendental subject that Hegel calls Kant a subjective idealist. But what is his alternative to the Kantian and materialistic models? For Hegel the object is an irreducible whole that exemplifies a universal concept or category. The Concept constitutes the essential nature of the individual object and the various parts of it are dynamically linked as the whole of the concept itself.

For example, a swan is not reducible to a combination of feathers, webbed feet, a beak, etc. It is part of the species of bird, but the species is intrinsic to its being a swan and cannot be isolated from it without entirely destroying the significance of what it is as a swan. It is this irreducibility of the self-differentiated concept that forms the basis of what we call the concrete universal. Understood in this way it is the Concept. This will become especially clear when we discuss the syllogism and the intrinsic relationship of the subject-predicate that cannot be understood in terms of mere external and separable elements.

The concept is not originated in time and space. It is not a subjective construct of our Minds. We may experience a lion, tiger, el-
In this way it appears to us that “animal” comes after its various instances in our experience. But logically “animal” is what is fundamental and original in all those examples. It is not something that is originated in our minds at all but what exists inherently and inseparably in each creature by necessity of its nature and what reason itself reveals to itself and appears to us as thought.

This is a central point that is the cause of much confusion in coming to understand absolute knowing versus ordinary knowing. We must learn to distinguish between determinations and relations based on causal experiences and those that arise from logical or rational development. Only by recognizing the difference between empirically influenced thinking and pure rational thinking can we rise to the level of absolute knowing.

The concept “animal” is one concept, identical to itself, and yet it is at the same time distributed among many different creatures that are called animals. Thus it is one and differentiated at the same time. This is its inherent nature. This is the fact that is presented to us from the start. It is up to Reason to make sense of this fact and to establish rationally how this can be. How can the concept be original, one and different simultaneously, distributed and yet self-contained all at the same time? The answer to this question leads us to what Hegelian philosophy terms development.

**Development**

By tracing the movement of thinking involved in concept formation and its implications with respect to its object — that movement itself is what establishes the ground of truth and basis of what we call reality. Seeing, for example, involves a process, and only when we have intimate familiarity with the thinking that goes on behind or within that process do we know it in its truth. Otherwise simply accepting what we see or sense at face value, without understanding what is going on at an internal level is naïve, unconscious existence - basically indistinguishable from animal life. Human life is the unique opportunity to rise above mere animal awareness and come to a more fully conscious existence. Serious work is required to do that — thinking work that is also called negative activity or the act of negating, because thinking means to negate what is directly present, i.e. not to accept what is merely given or apprehended but to try to understand it at a deeper or thinking level in order to comprehend its fundamental basis or truth.

Teachers and philosophers have the responsibility to present such material to us and direct our progress in the proper way. But this is a very subtle science that is not known to all, and even those who study it may easily get diverted to other more positive considerations and lose track of the pure negative nature of Absolute knowledge and how to approach it. The Absolute is pure negativity, even the negation of itself, or the negation of the negation. Nothing can remain as it is when coming in contact with the Absolute. Apparent being on its own is transmuted into being for the Absolute by the negativity of the Absolute. This process of the conversion of being is found at every step in the development of Hegel's system.

The word “absolute” comes from the Latin “ab solvere” that means “to dissolve.” Nothing can remain what it immediately is in contact with this absolute solvent. This intrinsic dissolving quality is the pure negativity of the Absolute in which whatever is dissolved therein also is retained just as we might find, for example, when sugar is dissolved in water. The sugar becomes one in quality with the liquidity of the water, but under proper conditions for crystallization the sugar can again appear in its solid form — so that it was actually retained in the liquid water but in molecularized form. Likewise, although everything is dissolved in the absolute, under certain conditions its moments can be manifest in apparently separated form.

Comprehending the unity of the movement and development of the concrete universal with itself as the concept is conceptual knowing or the Absolute Idea.