



# The Harmonizer

Science, Philosophy, Religion and Art are all branches  
of the same tree of knowledge

## The Harmonizer

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Science and Scientist

Sadhu Sanga

## SURRENDER TO SRI GURU

by

Srila Bhakti Raksak Sridhar Dev-Goswami Maharaja



Even great scholars are perplexed in understanding what is good and what is bad, what to accept, and what to dismiss (*kim karma kim akarmeti kavayo' py atra mohitah*). Even great scholars fail to understand their real necessity. This material world is a jungle of perplexities, where the soul has accepted so many different kinds of bodies in different types of consciousness. In the Laws of Manu, it is written:

*jalaja nava-laksani  
sthavara laksa-vimsati  
krmayo rudra-sankhyakah  
paksinam dasa laksanam  
trimsal-laksani pasavah  
catur-laksni manusah*

There are 900,000 kinds of aquatics, 2,000,000 kinds of trees and plants, 1,100,000 kinds of insects and reptiles, 1,000,000 kinds of birds, 3,000,000 kinds of four-legged beasts, and 400,000 kinds of human species. Manu says that the trees are in such a hopeless position as a result of their own *karma*. Their feelings of pain and pleasure are similar to ours; their souls are not of a lower standard. Still, they are in such a deplorable position as a result of their own *karma*. They have no one to blame but themselves. This is the state of affairs in this external world.

We are living in an environment which is afflicted with serious misconception, misunderstanding, misguidance, and misbehavior. How are we to ascertain what is good and what is bad, what we should aspire after and what we should reject? Innumerable alternatives have thronged in a crowd, coming to influence us. And when this area, covered by illusion and influenced by misunderstanding, is filled with such diversity, how can we hope to know the infinite spiritual world of Vaikuntha? With what attitude should we approach that realm which is transcendental, beyond the realm of the senses and mind, *adhoksaja*.

We must accept any way and any alliance that will help us gain entrance into that realm. We shall try to have even the slightest connection with that perfect goal

of our innate aspiration. We are helpless; we are hopeless in the midst of disappointment. We are in extreme danger. We rely on our free will, our capacity of selection for our own good, but it is too minute and helpless to guide us. What danger we are in! All around us are witnesses to this danger. How important is a real *guru* who can guide us to our real welfare.

We are in the midst of different forces that are drawing us, attracting us towards different directions, so proper guidance is the most valuable and the most important thing for all of us. If we accept direction from anywhere and everywhere, we will be misguided. Therefore, we must be careful to get proper direction.

That direction has been given by Krishna in the *Bhagavad-gita* (4.34):

*tad viddhi pranipatena pariprasnena sevaya  
upadeksyanti te jnanam jnaninas tattva-darsinah*

“To understand transcendental knowledge, you must approach a self-realized soul, accept him as your spiritual master, and take initiation from him. Inquire submissively and render service unto him. Self-realized souls can impart knowledge unto you, for they have seen the truth.”

## MYSTERIES OF LIFE

by

*Srila Bhaktisvarupa Damodara Maharaja (T. D. Singh, Ph.D.)*

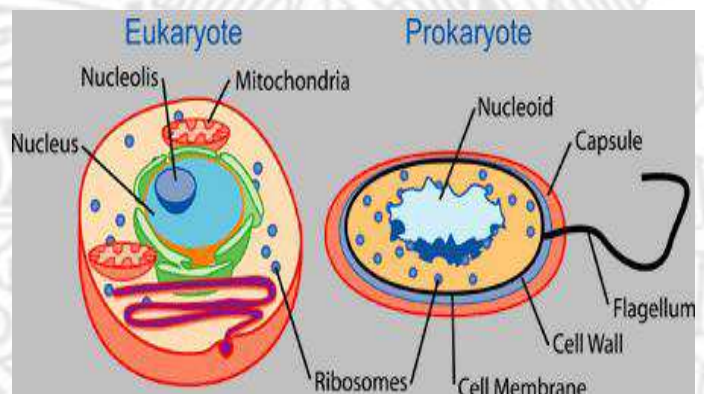


The study of metabolic cellular pathways and the synthesis of a large number of molecules found in the living machinery have so far demonstrated that there is still something missing in our understanding of life. The synthesis of amino acids from a mixture of methane, ammonia, hydrogen, and water molecules by electric

discharge, as reported by Miller, represents merely a chemical process. In no way does it come close to solving the riddle of the origin of life. Yet, excitement over this simple experiment is so great that those who profess belief in chemical evolution have concluded that such steps are the ones that will finally lead to the generation of a living cell. We do not, however, even know what a cell really is in its complete detail. It has been estimated that there may be as many as some 200 trillion molecules in a single cell, all executing thousands of coordinated reactions with precise timing and function. [1] Each step is performed in a specific order, keeping clear of other steps so as not to upset the balance of the reactions.

An example is the biosynthesis of L-isoleucine from L-threonine. We have noted that if the end product is supplied from an outside source, the synthetic steps are immediately stopped, the first step having been inhibited by the binding of the enzyme L-threonine deaminase with L-isoleucine. In biochemical language this is referred to as a feedback inhibition mechanism. Likewise, in the transcription of DNA to RNA, and the translation of RNA to proteins, all the steps follow directed instructions.

As mentioned in December 2010 issue, “Life is Beyond Physical Characteristics”, during an attack of an invading bacteriophage, the bacterium releases a restriction enzyme that recognizes the DNA of the invading bacteriophage and cuts the DNA into pieces, thereby disabling it. Simultaneously, the bacterium releases



another enzyme that defends and protects its own DNA from being cut by the restriction enzyme.

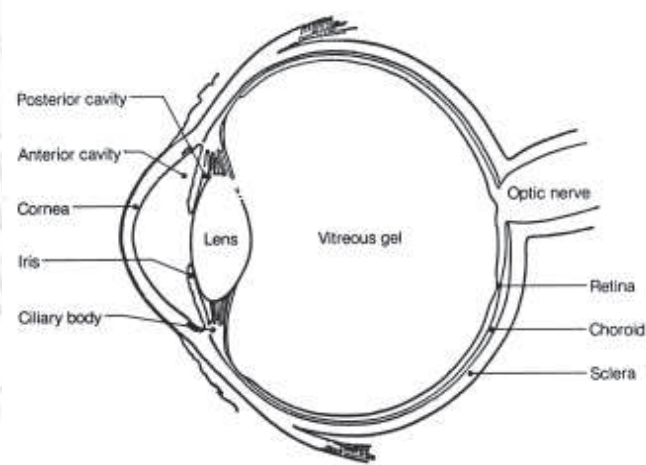
What makes a living cell perform all these seemingly purposeful chemical reactions? What are the chemical theories or principles that can explain such apparently conscious acts even at the molecular levels? What is the wave function that can explain such phenomena?

The author once asked molecular evolutionist Stanley Miller, at one of his lectures on the origins of life at the University of California, Irvine, “Suppose you were given all the necessary cellular chemicals. Could you create a living cell in the test-tube?” Miller’s immediate answer was, “I do not know.” [2] The point is that if this experiment cannot be demonstrated, molecular evolutionists cannot honestly claim that life has arisen from molecules. As explained earlier, a molecule, no matter how orderly and precisely arranged, is lifeless. To make the artificial gene work, the help of a living cell is required. All the molecules, including DNA and RNA, are only vehicles to carry out an instructed message, just like the running of a watch. But are the watch and the watchmaker the same?

Let us now turn to some explicit contemplative questions. What is the molecular operation that makes us appreciate a beautiful landscape or listen to a melodious symphony orchestra? What is

the molecular operation that makes us feel joy upon seeing a close friend or relative after a long time, or sad when losing a near and dear one? What is the molecular operation that makes a squirrel sense its ability to jump from one branch of a tall pine tree to another with perfect timing and accuracy? What is the molecular operation that makes the Pacific northwest salmon undertake the mysterious and dramatic odyssey of swimming hundreds of miles upstream in the face of many obstacles just to spawn and then die? What is the molecular operation that directs the tiny sandpiper to follow with hundreds of quick steps the course of a subsiding wave along the seashore to find its food? What is the molecular operation that makes the cuckoo lay its eggs in the nests of other birds as a meaningful trick? What enables the Nile crocodile, whose jaws can crush the femur of a buffalo, to gently pick up its egg and roll it between the jaws and free the hatchling without harming it? [3] What are those molecules which discriminate between such contrasting but spontaneous conscious acts? And finally, what is the molecular operation that makes thoughtful scientists come together to discuss the value of knowledge and the goal and meaning of life? Are all of these due to molecules? Is there any molecular operation or any multidimensional quantum mechanical equation that can describe these wonderful phenomena of life?

On the human level, there are so many subtle traits of personality, such as humility, stability and self-control, honesty, tolerance,



responsibility, cleanliness, love and so on. Are there any molecular mechanisms that can turn off and on to produce all these unique symptoms?



One can cite innumerable examples. We encounter marvels of life at so many levels, and the theorists of evolution cannot even think of touching these points. Darwin himself encountered insurmountable difficulty in conceiving how an eye could evolve. The fine, intricate details of the colorful feather in a peacock's tail were also impossible for him to

explain. He thus remarked: "I remember well the time when the thought of the eye made me cold all over, but I have got over the complaint, and now small trifling particulars of structure often make me very uncomfortable. The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick." [4]

Sometimes in human experience mental events happen suddenly and without apparent antecedents. Fine poetry comes from a poet's thought; the solution to a difficult mathematical riddle is revealed like a flash in the mind of a mathematician; an intricate chemical structure is revealed in the mind of a chemist; a whole symphony is inspired in the mind of a composer. Consider the experience of the famous composer Mozart, "When I feel well and in good humor thoughts crowd into my mind as easily as you could wish. Whence and how do they come? I do not know and I have nothing to do with it.... Once I have my theme, another melody comes, linking itself with the first one, in accordance with the needs of the composition as a whole.... Then my soul is on fire with inspiration, if, however nothing occurs to distract my attention. The work grows: I keep expanding it, conceiving it more and more dearly until I have the entire composition finished in my head though it may be long.... It does not come to me successively, with its various parts worked out in detail, as they will be later on, but it is in its entirety that my imagination lets me hear it." [5]

Are we to suppose that these phenomena are nothing but the products of chance and simple pushes and pulls? In Mozart we see a unique ability not present in any other members of his family. (Mozart's father, for example, was an ordinary musician.) If a biochemical machine was present in Mozart's brain that could generate symphonies effortlessly, where did this machine come from? If a human being were to design such a machine, he would certainly have to adjust many delicately interrelated variables, and this would require great intelligence and perseverance. Are we to suppose, then, that a random mutation of a gene or a chance combination of genetic alleles was able to produce such a machine? (We should note that the chance that a pattern will form randomly goes down exponentially with the number of variables entering into the pattern.) Or are we to suppose that by Coulomb's law and the spin-orbit interactions, such a machine will just naturally pull itself together, given enough time? All honest thinkers will certainly admit that life is the greatest mystery.

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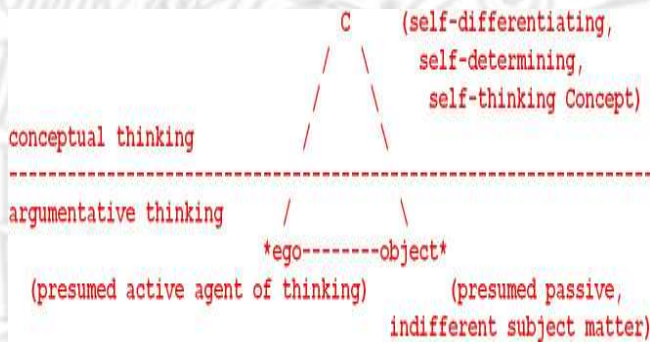
## TRUTHFUL COMPREHENSION OF REALITY

by

Sripad Bhakti Madhava Puri Maharaja, Ph.D.



In the previous issue (June 2011) it was indicated that the self-determining Concept is the a priori synthetic unity of the abstract ego-object duality. Basically the important conclusion from that article can be summarized in the following diagram.



The objective here will be to take the subject (ego) and object (thing) that are held fixed, separate and in opposition to each other by the understanding and explicitly show them to be dialectically related in the dynamical movement of thinking. The dialectical movement of thought was explained by example in the propositional statement, S is P. The movement of the unified Concept as a whole, in which the fixed subject and object are considered as mere moments, constitutes the basic underlying dynamic truth or reality. And the totality of the movements and moments in this dialectical relationship constitute the self-determining Concept. The thinking is involved in this dynamic movement of the Concept is called conceptual thinking. It is left to us to demonstrate that this thinking belongs to the Concept and not to the ego. We can understand this intuitively at this point by realizing that in the dialectical relationship of the propositional form, S is P, the object becomes as fluid and active as the subject or ego. Therefore it is not a mere egoic activity.

The Concept produces the self-object relationship as part of its content along with the movement of thinking or negation that

accompanies it. Both the subject and object will dissolve in the dialectical movement of thinking that is the actual basis of their relationship. In other words, the Actual is to be located within rational scientific thinking and not in the ordinary understanding (argumentative thinking) that ignores or is unconscious of the rational basis at its core.

This is not such a strange stance to take. Generally we have no problem of defying the sense impression we have of the Sun moving across the sky and accepting the system established by the scientists of a helio-centered solar system on the basis that it is reasonable. Of course, this is an empiric, material example and we must ultimately subject this idea to a rational, conceptual analysis for philosophy. However, it can serve as an example of how we consider the rational to be real over and above the immediate evidence of the ordinary understanding based on sense experience.



Ordinary propositional thinking changes in the light of conceptual thinking. At first an immediate difference is assumed between Subject and Predicate as we had in the case of “the swan is white” (refer to our October 2010 issue). Here the Subject, swan, and Predicate, white, are certainly distinct, yet the copula “is,” when considered in its strict significance as being, negates this distinction between the two. In this way the proposition establishes an identity between Subject and Predicate and thus creates an opposing significance to what the original proposition intended. It is not that one is right and the other wrong. Both have equal justification for thought and therefore both constitute the actual reality, and not the simple one-sided perspective. It is



**Hegel**

only for the sake of ordinary discourse that we do not get into the actual philosophical contradiction that is involved in making propositions, but we should not mistake what we take for our own convenience to be the actual.

Hegel gives the example of rhythm to explain how two

opposing concepts can work together to create a harmonious unity. In rhythm there is meter and accent. Meter is constant, consistent, regular timing, while accent is an interruption of that consistency. Thus one may count 1&,2&,3&,4& with equal emphasis and timing on each number, or one may count with emphasis or accent on a particular number or numbers. This is well known in music. The overall timing is not disturbed and the resulting rhythm is established. In the same way, the proposition, as emphasizing the difference between Subject and Predicate, is like the accent upon the underlying consistent identity between the two expressed in the conceptual comprehension of the proposition.

A philosophical proposition like “God is being” allows us to more readily associate the predicate, being, with something substantial in which the subject, God, is subsumed. Here we do not mean that God is being and nothing else, as if being described the whole truth about God. The original subject matter, God, is supposed to be the substantial reality that we wish to further specify. By the determination “God is being” we mean to express only one aspect of God that is indeed identical with God yet distinct as well. Likewise, the proposition “the actual is universal” seems to banish the manifold particularities of reality into what is merely ideal. Yet at the same time actuality is universal throughout the manifold of its particularities.

This identity in difference of propositional thinking must be kept clearly in mind. Equally important is to avoid the conflating of argumentative with conceptual thinking. One may conceptually comprehend one part of the development and then get stuck with an argumentative understanding in another part of the same development. In order to maintain the purity of conceptual thinking consistently and avoid bringing in fixed empirical perspectives, the empirical must be grasped as a moment (but only a moment) of immediacy in the overall development.

The Truth will not be only a result of this development, or something reached in the way of a proof, thereby signifying the end of the matter. The Truth is both the result and the movement involved in reaching it. The Truth is the whole. Thus the whole movement of thinking or negativity is not only the underlying basis of reality, it is the Real whose substance is therefore Subject.

The content of this reality as Subject consists of the different movements and moments of thought explicitly present in the Concept. Thus the movement of thinking that makes it Subject is also the content of that Subject. Thus it is Subject through and through. For this reason to speak of God as a transcendent Subject is misleading for it fails to express the differentiated content and immanent movement that is also God in the fullness of scientific, philosophical comprehension.

In conclusion, our study must preserve throughout the dialectical fluidity of conceptual thinking and should admit nothing that is not comprehended in terms of the Concept and is the Concept.

We should note here again that this is just a general overview of conceptual thinking. No specific Concepts or their differentiated content has been presented yet, as is found in the actual body of Hegel’s texts. It remains to consider what “knowing” is and how that establishes a perspective of the Absolute. However, “knowing” is only a perspective and in the end Truth has its own scientific method and content in and for its own Self. This self-developing organic whole is comprehensive and is developed in outline in Hegel’s *Encyclopedia of the Philosophical Sciences* [1] in three parts: Logic, Nature and Spirit.

To have a correct philosophical comprehension of Reality is essential if modern science is to make progress in its relentless attempt to penetrate into the furthest recesses of Nature. In future articles it will be shown how these philosophical ideas apply directly to the explanation of the most current data available in the modern biological study of life. Beyond that, of course, is the bearing of this knowledge to the ultimate goal of understanding the proper relation between Man and God and the world.

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