



The Harmonizer

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

The Harmonizer

www.mahaprabhu.net/harmonizer

Published Monthly

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QUALIFICATIONS OF A DISCIPLE

by

Srila Bhakti Raksak Sridhar Dev-Goswami Maharaja



Krishna has given us the standard by which we can understand what is what from a bona fide source. The standard to measure truth or untruth must come not from a vitiated, vulnerable plane, but from a real plane. And to realize that, we must have these three qualifications: *pranipat*, *pariprasna*, and *seva*. *Pranipat* means we must surrender to this knowledge, for it is not an ordinary class of knowledge, which as a subject we can make our object; it is supersubjective. We may be the subjects in this mundane world, but we will have to become objects to be handled by the superknowledge of that plane.

Pranipat means that one approaches a spiritual master, saying, "I am finished with the experience of this external world; I have no charm for anything in this plane, where I have already traveled. Now I am offering myself exclusively at your altar. I want to have your grace." In this mood we should approach that higher knowledge.

Pariprasna means honest, sincere inquiry. We must inquire not with the tendency of discussion or in the mood of argument, but all our efforts should be concentrated in a positive line to understand the truth, without the spirit of doubt and suspicion. With full attention we should try to understand that truth, because it is coming from a higher plane of reality that we have never known.

Finally, there is *sevaya*, or service. This is the most important thing. We are trying to gain this knowledge not so we can get the help of that plane, not so we can utilize that experience for living here; rather we must give our pledge to serve that plane. Only with this attitude may we approach that plane of knowledge. We shall serve that higher knowledge; we won't try to make it serve us. Otherwise, we won't be allowed to enter into that domain. Absolute knowledge won't come to serve this lower plane. We must offer ourselves to be used by Him, not that we shall try to use Him in our own selfish way, to satisfy our lower purpose.

With the mood of service we shall dedicate ourselves to Him; not that He will dedicate Himself to satisfy our lower animal purpose. So, with this attitude we shall seek the plane of real knowledge and receive the standard understanding. And then we can know what is what, and have a proper estimation of our environment.

This is Vedic culture. Absolute knowledge has always been imparted by this process alone, and never by the intellectual approach. Srila Prabhupada Bhaktisiddhanta used to give the analogy of the bee: honey is in a bottle, the cork is in place, and the bee has taken his seat on the glass. He tries to taste the honey by licking the bottle. But, just as the bee cannot taste the honey by licking the outside of the glass bottle, the intellect cannot approach the world of spirit. We may think that we have attained it, but that is not possible: a barrier is there, like the glass. Intellectual achievement is not real achievement of higher knowledge. Only through faith, sincerity, and dedication can we approach that higher realm and become a member. We can enter that higher plane only if they grant us a visa and admit us. Then we can enter that land of divine living.



So, a candidate must have these three qualifications before he can approach the truth which is on the higher plane of Absolute Reality. He can approach the Absolute Truth only with an attitude of humility, sincerity, and dedication. There are similar statements in the *Srimad-Bhagavatam* and the *Vedas*. In the *Upanisads* it is said:

***tad vijñānārtham sa gurum evabhiḡacchet
samit panih srotīyam brahma-nistham***

“Approach a spiritual master. Do not go to him hesitatingly or haphazardly, but with a clear and earnest heart.”

A GLIMPSE INTO THE MARVELS OF LIFE

by

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



In this article the author outlines a few examples of the marvels of life. One can feel awe and wonder upon meditating on these examples.

The Dutch anatomist and pioneer microscopist Jan Swammerdam (1637–80) painstakingly studied artistic design of small living organisms, in particular the studies of the metamorphosis and developmental patterns of insects. His impression was of indescribable awe and wonder in the face of nature's beauty. For him the source of this artistic design, complexity and natural order could only be divine, and his only response was rapture. While putting down his observation on the anatomy and metamorphosis of butterflies, he remarked:

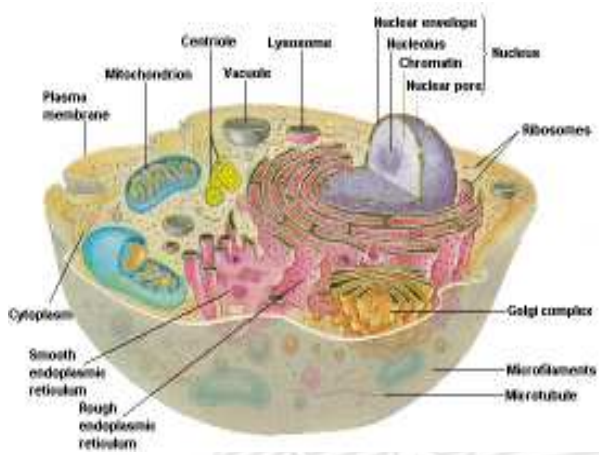


“How then can we avoid crying out, O God of miracles! How wonderful are all thy works! How beautiful are the ornaments! How well adapted the powers which thou hast so profusely bestowed upon thy creatures!”

HUMAN BODY – A SMALL UNIVERSE:

- + The human genome contains 3164,7 million chemical nucleotide bases (A, C, T, and G).
- + For our first 18 years, on average we add 100 million cells to our body *every minute*.
- + The human brain has 100 billion neurons, with untold trillions of connections and patterns or endless wiring sequences.
- + The average number of red blood cells in the human body is about 25 billion (about 5 billion per liter of blood). 25 million (or 1 percent) of them die every day, which works out to roughly 300,000 a second. A red blood cell can circumnavigate the entire body in less than 20 seconds.
- + There are 300 million tiny air sacs or alveoli in each adult lung. If these were spread out, their total surface area could cover a tennis court.

and many more...



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 junction 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 molecular levels? What is the wave function that can explain such phenomena?

What enables the Nile crocodile, whose jaws can crush the femur of a buffalo, to pick up its egg gently enough and roll it between the jaws, freeing the hatchling without harming it?



What makes a squirrel sense its ability to jump from one branch of a tall pine tree to another with perfect timing and accuracy?

A mother bird nurtures her chicks with the utmost love and care.



A mother's unique love and concern for her child.

What is that molecular operation which makes the cuckoo lay its eggs in the nests of other birds as a meaningful trick?



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



On the human level there are so many subtle traits of personality, for example: compassion, 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 symp-

Mozart (1756-1791) *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. Are we to suppose that these phenomena are nothing but the products of chance and simple pushes and pulls?*

Is there any molecular operation or any multidimensional quantum mechanical equation that can describe these wonderful phenomena of life ?

UNITY OF KNOWING AND TRUTH

by

Sripad Bhakti Madhava Puri Maharaja, Ph.D.



In his Introduction to the *Phenomenology of Spirit* [1] Hegel focuses our attention upon the general theme of the book: to scientifically comprehend the Concept of knowledge or knowing. Today, modern science proceeds as if "knowing" was a completely irrelevant subject for study, and gets right to the objects of knowing without a

moment's glance at the knowing process itself. This is called naive realism - the object we know is what it is in its immediate apprehension by the senses and no contribution from the process of knowing need be considered. But Hegel takes knowing as the prime subject to be considered, so he begins by stating the three different perspectives toward knowledge that were prevalent at his time (and more or less held today as well).

1. Knowledge as an instrument.
2. Knowledge as a medium.
3. Ordinary conception of knowledge as natural consciousness.

Modern science completely ignores the nature and contribution of the process of knowing in its investigation of the world or of Truth. This kind of ignorance is not acceptable for rational thought and we find that this neglect has caused some fundamental problems, for instance in quantum physics where

the Copenhagen interpretation (Neils Bohr) actually finds it necessary to attribute a role to consciousness or knowing.

The problems with these three perspectives of knowledge.

If knowledge is an instrument then what is examined by it is not left unaffected since some distortion must occur due to the instrument itself. Kant took this perspective very seriously, analyzed the contribution of knowledge as instrument and concluded that ultimately we could know nothing about the noumenal Truth (the thing-in-itself) by only its appearances. Only knowledge of the instrument was given by him, but a great deal of Truth was already presumed by this perspective, viz. that the knower was different from knowledge, and that knowledge was distinct and separate from the Truth. In other words, Kant concluded that knowledge is outside of Truth! This, of course, defeats the whole endeavor of knowing, and therefore this idea must be rejected as problematic.

Knowledge as a medium also puts knowing outside of Truth or alongside of it. This is also problematic because as a medium or type of substance it would also have to be considered part of Truth. Spinoza presumed that thinking was merely an attribute of Truth emanating like a ray refracted through the passive medium of knowledge. Even if this medium could be comprehended and the refractive influence calculated we would not thereby be able to determine the Truth itself in its purity since the ray as thought is knowledge and thus knowing is not a medium. If we try to

eliminate the ray to get to the bare truth we are only left with the other attribute of Truth for Spinoza which is extension. But objects are not merely spatially extended but also differentiated and determinate.

The ordinary understanding of knowledge is that it is like a net or a glue-stick that immediately captures Truth upon contact. This capturing, however, implies that something is happening, yet at the same time this understanding assumes it is instantaneous or immediate. Thus it denies that knowledge is active, even though knowing requires an endeavor, or if it is an activity of the Truth itself then the whole activity of knowing is apparently just a trick of the Absolute.

What is significant and common to all of these perspectives is that they place knowledge as different from or outside of Truth.

The Truth is Absolute

The Absolute or Absolute Truth are one and the same. The Absolute is True and the True is Absolute. This is the meaning being adopted here. To say that knowledge is capable of apprehending some other type of truth besides what is Absolute will be called either relative (conditional) truth or even misconception or illusion.

We have before us the task of elucidating the scientific meaning of the terms absolute, knowledge, Truth, etc., in other words to establish the Concept of knowledge.

Knowledge as phenomenal

To claim that there is a scientific Concept of knowledge may seem unfounded since it is only an assertion here at this point. We still have to demonstrate this claim. It will do no good to merely argue against the ideas of knowledge as instrument, etc. that may already be accepted since these are also unfounded assertions. What we will therefore actually do is to show that the Concept of knowledge is not a mere assertion like the others by turning knowledge against itself as an assertion.

An assertion may be considered what is merely given to us, and what is given to us may also be considered to be what appears or manifests. In this sense we will be considering knowledge as it appears or in its phenomenality, i.e. as it appears to natural consciousness, and work through knowledge or knowing in this modality until we arrive at the proper Concept of knowledge which gives us Truth in and for itself. This is what we would intuitively expect of knowledge so now we have to explicitly and scientifically show in what way knowledge and Truth can be understood to give this relation.



Hegel

The highway of despair.

Natural consciousness considers whatever it knows to be real, i.e. for it to be in possession of real knowledge. Because we are following a path of critique of such phenomenal knowledge our progress will exhibit a negative relation toward it. In other words, natural consciousness will lose its truth for us on this path, so Hegel calls this progress the “highway of despair.” Scientific understanding means to not simply accept what is merely given but to inquire rationally into it so as to gain a proper comprehension. There will necessarily be steps along this path that we may also call stages of consciousness. These stages may be considered the history of the education of consciousness to the platform of Science. This history is not temporal, but consists of the sequence of logically necessary stages that appear in the rational or philosophical development of science. Some correspondence will certainly exist, necessarily, but we should not confuse one for the other.

The positive aspect.

The education of consciousness does result so there is a positive progression on this otherwise negative path. The goal is reached when knowledge no longer needs to go beyond itself, i.e. when knowing and the object of knowledge are identical in their difference, so that the object is properly conceived, then knowing and Truth are united, which is the Truth in and for itself.

The positive aspect in negation is that it is specific or determinate negation and thus has a positive element in it. Therefore negation is not to be considered only one-sidedly in its negative significance. Negation does not leave us with nothing; e.g. the negation of day is night, but night is not nothing.

The things of nature appear to be limited to what they are - they are not able to go beyond their own immediate existence or limit, i.e. their negation. Thus they are called finite. Consciousness, however, is the Concept of itself. We have a consciousness of a particular limited nature, but we are also conscious of the fact that we are conscious. In this sense consciousness transcends itself and is consciousness of itself, or self-conscious. Thus it negates or goes beyond its own limit or negation. This again is a positive result called the ego or “I.” Thus it is infinite; but as a particular individual among other individuals it is not Absolute.

To be continued ...

References:

1. Hegel, G.W.F., *Phenomenology of Spirit*, Translated by Miller, A.V., Oxford University Press, (1977).