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## WHY EVOLUTION IS NOT TRUE

Bhakti Madhava Puri, Ph.D.



Are physics and chemistry sufficient to provide a basis for a theory of everything? The worldview of materialist naturalism that forms the foundation of neo-Darwinian evolution, Big Bang cosmogony, and molecular biology in general has been subjected to challenge for its monumental failure to explain life, consciousness and other mind-related aspects of reality. Two recent books, *Why Evolution is True* by Jerry Coyne [1], and Thomas Nagel's *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False* [2], both authors being atheists, reflect the deep rift we find, not only in the religious conflict between creation and evolution, but in the fundamental awareness we all have that we are more than just molecular matter. This common sense understanding can only escape the notice of a particularly

shallow ideological dogmatism that insists it has all the answers based solely on its unprecedented technological success.

Not that the modern theories of physics have even given us a complete understanding of matter. There are major unsolved problems in the field including the failure to unify the general relativistic theory of gravity with quantum mechanics (with devastating differences in the calculation of the cosmological constant on the order  $10^{120}$ ), or the resolution of the mystery of dark energy and dark matter in the universe, and so on. Regarding the latter, Lee Smolin [3] writes:

“Fully 70% of the matter density in the universe appears to be in the form of dark energy. Twenty-six percent is dark matter. Only 4% is ordinary matter. So less

than one part in 20 is made out of matter we have observed experimentally or described in the standard model of particle physics. Of the other 96%, apart from the properties just mentioned, we know absolutely nothing.”

Materialists consider matter to be real, yet the term “matter” is still not well-defined across a widely varying range of contexts. Mass represents the quantity of matter, but does not define it. Thus massless particles such as photons cannot be considered matter, but energy. Energy requires a generating source. While mass and energy are related according to Einstein’s equation,  $E=mc^2$ , the energetic source is unexplained or tautologically identified again with mass.

Beyond the ontological problems of scientifically defining matter, the phenomenal failure of biochemistry to explain living organisms has become increasingly apparent with the advancement of research in that area. Common sense distinguishes between non-living matter and organic life, between the natural mechanisms that characterize material systems and the natural teleological (goal-directed) character of living organisms. Thus the attempt to reduce life to a mere mechanistic phenomenon amounts to eliminating life as a distinct category of reality. It is only to be expected that the result of such an attempt must end in failure due to a category mistake.

The philosopher Immanuel Kant wrote, “There will never be a Newton of a blade of grass.” [4] In other words, even with all our scientific knowledge, all the scientists in the world working together, would not be able to make a single blade of grass. Despite scientist’s apparent knowledge of photosynthesis, they are utterly helpless to produce even a small grain of wheat from chemicals. Yet the smallest wisp of life readily produces the vast abundance of verdant Nature without laboratories or any sophisticated equipment. Scientists can modify the chemistry of food, but they cannot produce it from those same chemicals. This means that ultimately their

daily bread comes, not from scientists, but from the primordial Life that underlies all Nature. Scientists may boastfully claim that God is an unnecessary hypothesis for their understanding of the universe, yet they remain completely dependent for their very sustenance upon the inscrutable Life that makes Nature possible. Still Godless science claims the loyalty of many intellectuals in the name of evolution. But why? Simple questioning of the most basic claims of scientific materialism is enough to dislodge its most imperial asseverations. Are we witnessing what social psychology documents as paradigmatic “groupthink”, in which intellectual conformity trumps reasonable understanding? Such a possibility is not without precedent and, as Kuhn [5] and others have shown, it is not something to which science can claim immunity.

Thomas Nagel, professor of philosophy and law at New York University, writes (*pg. 128*) [2],

“I have argued patiently against the prevailing form of naturalism, a reductive materialism that purports to capture life and mind through its neo-Darwinian extension. . . . I find this view antecedently unbelievable—a heroic triumph of ideological theory over common sense. . . . I would be willing to bet that the present right-thinking consensus will come to seem laughable in a generation or two.”

While the origin of life is beyond the explanatory and laboratory endeavors of modern science, evolutionists claim their theory is not challenged by that repeatedly established fact. The presumption that a mechanistic theory can explain organic life in Nature underlies the idea that such life is subject to evolution as the result of the mechanistic processes of Nature. If life is an inherently purposeful feature of Nature, then capricious modification by mere mechanical means would be inadequate for properly explaining its behavior. Empirical confirmation of this fact comes from numerous lines of evidence, such as long-term stasis found in the fossils of the geological column, exquisite self-

monitoring in proof-reading and error correction at the genetic DNA level, predominantly fatal results of random mutations, and so on, which show that living organisms exhibit a sensitive, regulated, purposeful nature for self-preservation, actively resisting change or evolution, as well as showing adaptive flexibility, but within the limits of their species.

The discovery of numerous processes of genetic mobility within organisms has upended the traditional conception of evolution based on mutation/selection. The theory of neutral mutations target changes beneath the influence of selection, the phenomenon of genetic transfer scrambles any attempt at building simple tree-like structures of progressive evolution, and mathematical probability calculations undermine the possibility of there having ever been an evolutionary development of the basic biochemical ingredients of even the simplest bacterium. These are only a few of the underlying issues that challenge evolution even before the intractable problem of explaining how consciousness and other mind-related phenomena could have arisen from insentient matter. Not only is the idea of neo-Darwinian evolution proving to be false, it is increasingly being recognized as obstructive to a proper development of a completely new systemic science of biology. Physiologist Denis Noble writes, [6]

“If the value of a scientific theory lies in its utility then Neo-Darwinism has been of negative value in physiology. The reasons are that the theory itself is confused about what genes are and what attributes may be ascribed to them. It is also incompatible with more recent developments in molecular biology.”

An adequate science of Nature would have to be able to explain the existence of mind and consciousness in the universe. The physical sciences have failed and cannot be expected to provide such an explanation. A metaphysical commitment to material reductionism is an ideological presumption, not a scientific conclusion. It is neither obvious how

consciousness could have originated from matter, nor how it could ever be expected to do so. As Nagel remarks, “It is an assumption governing the scientific project rather than a well-confirmed scientific hypothesis.” No sufficient evidence has ever been produced to mitigate this fact. Given the intricate complexity of a living organism, that only increases with our advancing knowledge of its details, the probability that life is the chance product of nonliving matter acting under the influence of the laws of physics and chemistry is unthinkable.



Despite such serious scientific objections, it is quite symptomatic of the extreme ideological nature of the issue when atheistic scientists of the stature of Francis Crick, for instance, nonetheless brazenly seek to establish the materialist creed of naturalism, “You’, your joys and your sorrows, your memories and your ambitions, your sense of personal identity and free will, are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules. . . . Who you are is nothing but a pack of neurons.” [7] Another materialistic atheist, Richard Dawkins writes [8], “The universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil and no good, nothing but blind pitiless indifference.” This reductionist agenda conceives that every action is determined by a preceding physical cause that can ultimately be traced back to the Big Bang. As Andrew Ferguson [9] put it, “A materialist who lived his life according to his professed convictions – understanding himself to have no moral



agency at all, seeing his friends and family as genetically determined robots – wouldn't just be a materialist: He'd be a psychopath." Of course, no one actually experiences the world as a materialist, but to embrace such a world view would be to lead a schizophrenic existence that might lead to being a psychopath.

The debate over evolution is not just between theists and atheists. Some of the more interesting challenges appear between atheists themselves. Jerry Coyne, atheist scientist, for example, champions evolution, while atheists Fodor and Piatelli-Palminiri [10] make a devastating attack on the heart of evolution theory, natural selection. They bring up long standing problems with natural selection, which has always been the weakest link in Darwin's theory. They succinctly pose the problem,

"How can natural selection distinguish between, on the one hand, phenotypic traits that affect fitness and, on the other hand, their endogenously linked phenotypic correlates... selection [cannot] apply differentially to coextensive properties."

Furthermore, they suggest doing away with the "scientific" idealism of evolution entirely and replacing it with the narrative of the actual natural history of an organism.

"[I]f you wish to explain the effects that a phenotypic trait has on a creature's fitness, what you need are not its history of selection but its natural history. And natural history offers not laws of selection but narrative accounts of causal chains that lead to the fixation of phenotypic traits. . . . Darwin made the same sort of mistake that Marx did: he imagined that history is a theoretical domain; but what there is, in fact, is only heterogeneity of causes and effects. . . . As far as we can tell, this is slowly becoming the received view in evolutionary biology."

Science has come to represent two different things: (a) a body of knowledge, and (b) a method for

acquiring knowledge. The problem arises when it is forgotten that there is no independent body of knowledge for science apart from its method – it keeps changing according to the results of the latest findings of the scientific method. The method is not to be abandoned because of those who would like to replace it with a fixed body of knowledge, which then becomes ideology. If biogenesis is hypothesized as the law of Nature, and we observe that life comes from pre-existing life in all our experience, while the hypothesis of abiogenesis, that life comes from matter, is never backed by any observation, then according to the scientific method – which one is to be accepted as true scientific knowledge? Obviously, the one backed by empirical observation. It is necessary to get free of ideological "knowledge," and return to science as a method for gathering evidence that may lead to conclusions beyond the material naturalist view of Nature, and conforms to what we experience and rationally understand about the world in which we live.

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# Natural Intelligence and Teleology in Plants – Part 1

Bhaktivijnana Muni, Ph.D.

## 1. Natural Intelligence is a characteristic of Life

Natural intelligence is an inherent function of cognition. All living organisms naturally display intelligence at cellular, behavioral and community level. However, no perfect ontological definition of intelligence exists within the realm of molecular chemistry and physics. Stenhouse defined intelligence as an adaptively variable behavior during the lifetime of the individual involving descriptions of cognition and adaptation. [1, 2] A practical definition for intelligence is: the capacity for problem solving [3]. Intelligent behavior in organisms is species specific. Every organism has particular capacities. Intelligence exists between species, within species and within organisms.



Fig. 1 Nobel Laureate Barbara McClintock, *A Feeling for the Organism*

Barbara McClintock meticulously studied maize plants and got the Nobel Prize for the discovery of transposons, or jumping genes (Fig. 1). She convinced the scientific world that causal modes of cellular and genomic functions are circular, i.e. both causal and consequential to each other, and that demands a whole cell approach. It overcomes the limited and failed gene-centric determinism of the New Synthesis era in biology. A Cell is an organism even at the level of molecules. Shapiro [4] describes the concept of genome function as genomes functioning as true intelligence systems which can be readjusted when conditions require. Intelligence at the molecular level is occurring because it is working as an organ of the cell or whole plant. The Genome functions as an

adaptable systemic variable. Consequently there is no such concept as a central dogma which can explain genomic phenomenon. Molecular concepts are inadequate for addressing natural intelligence. McClintock once said, "Every time I walk on grass I feel sorry because I know the grass is screaming at me." [5] In other words plants are sophisticated beings possessing all the sensitivities that are associated with life. The object of her study (plants) became subjects in their own right. [6] She said, "A goal for the future would be to determine the extent of knowledge the cell (organism) has of itself and how it utilizes this knowledge in a thoughtful manner when challenged." [7] As McClintock envisions it, the science of organisms will have to reorganize its whole way of looking at living organisms and doing research. A completely new realization of the relationship of things to each other is necessary. But she was quite clear that at present we lack the tools needed to explain the observations of the laboratory within mechanistic logic. We lack concepts of wholes when they are irreducible to their parts (molecular components like DNA).

## 2. Intelligence in Plants

Terewavas [8] has written a number of articles on plant intelligence. We will take a summary of his presentations. Plants display sentient qualities like detailed sensory perception, information processing, learning, memory, choice, self-recognition, foresight, and predictive capacity. Plant intelligence is today studied under several categories like, (i) plant perception, (ii) purpose, intent and decision making, (iii) learning, memory and biological information, and (iv) problem solving.

### 2.1. Plant perception

Plants experience immense environmental complexities in the wild. Trewavas [8] is of the opinion that in the wild the intelligent features of plants are more evident, as it has to deal with much greater complexity unlike the controlled laboratory

conditions. Plants are sessile and therefore they have a constant demand to be extremely sensitive and perceptible to the local conditions. Plants can detect footprints or stones on the soil. Etiolated seedlings can differentiate between two sources of light of varying intensity so slight that it could not be detected even by ordinary photometric methods, by always bending promptly towards the source of higher intensity. [7] Numerous abiotic signals like humidity, light, minerals, gravity, wind, snow melt, soil structure and composition etc. are sensed by plants. For example shape, growth and direction of stem are altered to maintain an optimal position relative to sunlight. Leaf positions are adjusted to optimize light collection. Roots track three-dimensional humidity and mineral gradients in soil. When resource-rich patches are encountered there is tremendous growth. Deliberate evasive action is taken when roots of the competitors approach in their vicinity [9]. The dodder, a parasitic plant, assesses the exploitability of a new host within an hour or two of its initial tactile contact. Plants integrate the signaling information but their responses cannot be said to be fixed (autonomic) or statistical. These are individual responses that involve assessment of each situation. For example gravity signals can be overcome by other factors like touch. Even clones are different individuals. The shoot phenotype is crucially dependent on the identity of the neighbors. The root systems sense soil volume. They recognize and discriminate between the neighboring roots of the same or different species indicating self-recognition at all levels. [10] Plants are highly perceptive and able to integrate systemically large amounts of environmental information and give a studied response. The totality of signaling and environmental complexity yields a constantly changing complex topological surface and the plant must navigate through it optimally [11].

## ***2.2. Purpose, Intent, learning, memory and decision making***

Purpose and intent are sentient characteristics and cannot be described by mechanical or chemical laws. For example purposeful movement of an ant over a piece of graph sheet cannot be calculated by any equation. The view that plants were passive beings [12] has changed. Just as animals, plants actively resist the push and pull forces of the environment.

Persistence of plant activity is often independent of the signal that may have initiated it and exhibit purposeful variation in the direction of persistent movements [13]. Plants do not possess a nervous system or brain like animals. Yet time lapse photography reveals immensely sophisticated purposeful activity. Warwick stressed the need to recognize that a central nervous system was not a prerequisite of intelligence. Bateson indicated that cognition defined as the act of knowing, is implicit in all life. Plants do perceive, respond and thus know about their environment and are therefore capable of cognition and intelligence. [14, 15]

Plants are in ceaseless motion as they develop, search for light and nutrients, avoid predators, exploit neighbors, and reproduce. In all these functions plant movement reflects their predictive capabilities. Examples are tropical bending to light or gravity, thickening along stems that accompany wind sway, leaf abscission during water scarcity, average seasonal tree leaf temperature maintenance at about 21°C in subtropical to arboreal trees. [16, 17] Molecular processes in the cell have been described as goal-directed behavior, and possessing holistic activity of circular causation between the cell organelles and whole cell. [6] These cognitive acts are identified within the processes of plant metabolism as proofreading, checkpoints, error corrections and end-point determination. In other words, metabolism is not chemistry because chemistry can never spontaneously become a means to an end. The processes can be written down as an algorithm containing Boolean logic, viz., AND, NOR, XOR, OR gates making wise informed decisions. Intent is demonstrated by the individual root systems as growing to actively deny resources to competitors [9]. Plants gather information about their surroundings, combine it with internal information about its internal state and identity and make decisions that reconcile its self-preservation within its niche [18]. Neo-Darwinism portrays organisms as passive in the face of random selection (Natural selection). But the cognitive and intentional behavior makes natural selection a poor-fitting Procrustean bed. [19] The experimental results of McClintock and other plant biologists spread all over the world make the organism of plants a dynamic co-participant in its self-expression.



### 2.3. Learning, memory and biological information

Biological information includes the meaningful interpretation of syntactic information. Internal communication is based upon meeting the needs of self-preservation. It does this by assimilating the environment by co-production between the totality of plant cells as a whole, the tissue structures, other proteins, nucleic acids, large number of hormones, peptides, various lipids, sugars, cell wall and internal organelles, wall components, complex carbohydrates, and so on. The task of computing this enormous quantity of information cannot be fully comprehended by linear logic alone. None of the analytical methods are applicable. An organism is an irreducible whole. Cells that are morphologically uniform exhibit enormously different responses to every signal. Organisms are self-differentiated wholes, meaning huge reservoirs of individual cell behaviors are synchronized to produce many varieties of organismic behavior [8]. These co-produce numerous complex elements of control, switching processes and interacting positive and negative feedback controls within the living cell. Yet the details of cellular structure and function are currently ill-understood and the work of McClintock is showing a way out of the unfruitful mechanistic impositions on biology.

According to Mancuso, "Plants sense, memorize, and process experience, and use this information for their adaptive behavior ... as living organisms act as knowledge accumulating systems [20]." Preprogramming by some sort of direct genetic means is neither likely nor possible. Only intelligent, flexible responses can provide the individual with the ability to master this complexity of environment and get this optimized adaptability [21]. Memory is very important to plants especially for survival in wild conditions. Herbivory produces memories of previous attacks that help form defense processes. These are long enduring memories which help developing resistance. Plants can assess potential futures from past cumulative memory by integrating them with present conditions [8].

Heliotropic plants adjust to an optimally situated leaf orientation by learning the direction of the

movement of sun. Plants respond to stresses by complex learning procedures that include reinforcements over time. For example resistance to extremely damaging stresses is acquired by progressive application of a milder but increasing strength of stress. Thereby plants become enabled to develop a faster, stronger and adaptive resistance to subsequent stresses of similar kinds. There is a trial-and-error learning process, which means plants learn from their needs of self preservation. Capacity to predict future loss of photosynthetic light and to produce shade-avoiding phenotypes is extensively reported [8].

### 2.4. Intelligent Problem solving in Plants

Individual plants have to adjust to uneven distribution of light, minerals, soil structure and water, competition, along with variation in rainfall, wind and damage by diseases, pests and herbivores. Flowers need to be positioned where pollination is optimal. The costs and benefits of these behavioral adjustments during growth and development

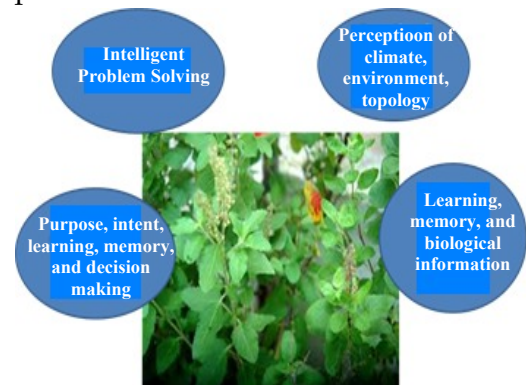


Fig. 2: Displays of natural intelligence and cognition in plants

require assessment of resources and environment [22]. Growing roots and shoots can locate rich resources. When resource receptors reach crucial levels, decisions are made for greater proliferation so that the surface area for absorption of energy, minerals and water is increased. Leaves are positioned to minimize self-shading by petioles. The pulvinus rotates the lamina to face the optimal direction of light. When on one side light becomes blocked, a plant resiliently turns to another. Decisions are made to seal connecting vascular systems when branches are overgrown [8]. Plants forage for environmental resources by estimating

availability over a period of time in the future. New light resources are explored well in trees by long shoots. Short shoots are good in exploiting available light due to a profusion of leaves that they carry [23]. Rapidly growing roots explore available mineral and water resources in the soil for further root development. In this way plants exhibit natural intelligence and problem solving capacities.

In conclusion, natural intelligence is the property of the whole organism and cannot be explained in terms of artificial intelligence concepts of popular linear mechanical logic. Distinguishing plant and animal intelligence by the term “natural intelligence” can be considered appropriate for denoting cellular and organismal intelligence (Fig. 2). In the next section, we will recount the arguments from Kant and Hegel that show natural intelligence will require teleological explanations. In other words, the law-governed lower activities of matter (physics and chemistry) are of insufficient explanatory relevance when explaining natural intelligence. Teleological explanations are the proper foundation for explanation of all biological phenomena. Higher level teleological explanations are the substantial concept of organisms.

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# WHAT IS RELIGION? – A VEDIC PERSPECTIVE

Rsiraja Das, M.Sc.

## INTRODUCTION

When Newton created his theories of motion, the Catholic Church never considered study of the world through scientific means to be in any way contradictory to the tenets of religion; indeed, they believed the scientific theories actually described God's grand plan for the universe. This view stemmed partly from the restraint scientists themselves exercised to protect their nascent endeavors from a more entrenched Church. It seemed at that time that science and religion would never step on each other's shoes; that their objects would always be distinct. For example, laws of science will tell us what happens when someone presses a trigger but they cannot tell us whether or not we should pull the trigger. And their turfs were demarcated by a choice of subjects with which each one must deal. While science deals with matter and its laws, religion was to deal with morality, ethics, human consciousness, afterlife, happiness, God, and so forth.

As time progressed, however, this distinction was blurred because science has taken on more and more areas that were traditionally considered the domain of religion. For instance, neuroscientists aim to describe consciousness based upon biology; biologists want to provide evolutionary explanations of ethics and morality; physics tries to explain origins through big bang, and so on. Not surprisingly, these explanations contradict religious theories. Perhaps the only religious topic that remains outside of science today is God. And many scientists claim they just don't need this "hypothesis".

So -- is there anything outside science that religion can legitimately claim to be its own? Here, the attempt is made to describe a unique object of study for religion. This uniqueness is not opposed to science; in fact, the object of study is based on ideas of matter given in Vedas. However, the idea of religion is an object that clearly identifies the focus for religion. But before we can appreciate this object of religion, it helps to take a closer look at the Vedic view of material reality and its interaction with consciousness.

## VEDIC VIEW OF REALITY

We may consider that creation according to the Vedas takes place in two stages. The first stage involves the manifestation of symbols, which, at that point, are

pure universals that appear un-interpreted. The original, primordial material reality is therefore symbolic; it is just words without meanings. After the creation of symbols, in the second stage, meanings are created, by particular acts of interpretation of the symbols. Multiple realities emerge at this time, each representing a different manner in which symbols are interpreted. For example, a "rose" can mean a "physical state", a "sensation", a "concept", a "method of using", a "kind of pleasure", and so on. By interpreting a symbol in many ways, physical states, sensations, concepts, methods or procedures, pleasures, intentions and other categories are created.

Debates in philosophy of science are replete with attempts to reduce the variety of meanings into just one kind of reality. Reductionists claim that only one of these interpretations of a word is in fact real, while all others are epiphenomenal. But which interpretation is real? Are sensations more real than concepts? Are methods more important than sensations and concepts? The history of epistemology is replete with arguments on all sides. Within science, philosophers have emphasized a variety of approaches including "a free conceptual construction" (Einstein [1]), "operations" (Bridgeman [2]), "sensations" (Comte [3]), "objectivity" (Smart [4]), and so on. Each one of us (including scientists) at various points alternate between different meanings.

The Vedic tiered view is that there are various kinds of meanings, all of which are equally real, because the meaning of a word is not fully understood unless we grasp all its interpretations. Symbols and their interpretations are therefore called *sabda-brahman* and *artha-brahman* or realities of word and meaning. In this view, the symbol "rose" precedes the creation of meanings of the symbol. Sensations, objects, concepts, uses, pleasures and intentions about "rose" are all various ways in which we can understand the word "rose", although no one meaning reduces to the others. To know the meaning of "rose" is to know all the ways in which the term can be interpreted, including that it represents some sensations, some objects, some concepts, some methods, some pleasures, some intentions, and so on. Similarly, any ordinary term such as "table" can be interpreted variously as a thing (plastic, wood), as a structure (round, square) as a function (for study or for eating) and as intents (my table versus his table). The point is

that there are many facets to a word which together form a complete description. Each of the facets is a complementary and a different way of describing an object. We must know all the ways and facets of a word before we can claim to truly know the meaning of that word completely.

### **MATTER-CONSCIOUSNESS INTERACTION**

One such interpretation of a term is the “meaning to life” that it entails. For example, we sometimes say that “this book means a lot to me”. The “meaning” that we are talking about is not the content in the book but its significance for us. Some things are significant while others are not. In fact, we know things because we find them significant. Thus, we might attend a particular meeting because it is relevant to us, or we avoid a gathering because it is not relevant for us. In everything that we do and know, we seek significance. We will engage in an experience if it is significant for us, and will avoid it if it is not.

A symbol is a signifier that bears significance. Significance represents a deeper level of meaning than the mere objective symbol, and is a prior necessity before consciousness perceives anything. Significance is therefore the first interpretation of a symbolic reality. We engage in further interpretations only if the first interpretation yields an interesting outcome – i.e., it is significant to us. The meaning of life is the bridge between matter and spirit because the significance determines whether we become conscious of the world or not. We choose to be conscious of certain facts only when we find them significant. Consciousness seeks significance, before it experiences the world.

Vedas describe that consciousness is between material and spiritual, and that it can exist in either realm. The choice of realms is basically what consciousness finds relevant, meaningful and pleasurable or what kinds of meanings, relevance and pleasures it seeks. Body, mind, intelligence, ego, etc. are developed based on this choice. Consciousness interacts with matter or spirit based on a choice and this choice is mediated by the signification consciousness experiences in matter or spirit.

### **UNDERSTANDING SIGNIFICANCE**

There are many kinds of significances in the world – such as to attain security for ourselves, to love and cherish our close ones, promote a certain ideology, and so on. We engage in an experience because of these significances. Thus, we might fight a war because we want to ensure our security, or to protect our loved ones, or because we want to propagate our ideology and destroy the ideology of others. The war itself involves some facts. But the significance of these facts

varies from one individual to other. The world is described in terms of some facts. But we decide to experience these facts only if we find them significant to us.

Today, there are many biologists that practice biology to provide for themselves a means of livelihood and survival. There are others who study it for the sheer joy of discovering the mysteries of life in nature. Yet others see a meaning in their life because they find solutions to life-crippling diseases. And a few wish to use biological facts to propagate atheism or materialism. The object of study may be the same, but they are attracted to that study for different reasons. In fact the reason for an activity determines whether or not we engage in that activity. The same activity acquires a new meaning for us when we change its underlying significance. We may then decide to engage in it, when earlier we may not have felt inclined towards it.

Each of us has ample experience of this process. A philosopher, for example, does not begin to see the relevance of his study only after spending 20 years mastering it. He rather finds the study relevant from the very start. It is because of this relevance that he enrolls himself into a philosophy degree or picks up a book on philosophy. The relevance might be weak to start with, but it must be present to even start an activity. Significance is thus not a post-hoc addition. It is rather the reason that precedes creation.

### **SIGNIFICATION AND VEDIC RELIGION**

While Vedas describe a number of theories, facts, practices and norms, they ultimately ask this fundamental question: “What is the significance of all of this?” What does all of this mean to an individual living being? The proper object of study for religion is this significance. It is a deeper level of reality that gives us our “meanings of life”. In every experience, this “meaning of life” accompanies the facts of the world. It is due to this combination that we even experience the fact. The Vedic view therefore is that religion is not the activities, facts or practices, but the significance with which they are performed. Thus, Vedas advise: continue doing whatever you are doing as part of your natural set of prescribed duties, but change the fundamental underlying significance of why you do these activities. The gradual evolution of this significance is religion. While a person might perform an activity for survival or propagating an ideology, he must end up with the most original of all significances – God – that preceded creation.

The original significance of everything is God because all significances are originally created by the glance of

God on primordial symbols. God creates the universe by first creating His symbolic representation – given by the vibration OM. Because symbols signify significance for a signifier, along with the creation of these symbols, their relation to the signifier God is said to be established by His glances on them to create interpretations. The first such interpretation is significance, and why God finds the world significant. That is, before creation takes place, God establishes the significance for the act of creation. The original significance of creation is that God finds it meaningful in certain ways.

Alignment with this signification is the purpose of religion. Presently, our significances may be different from the original significance of the universe. When the meaning of our life aligns with the meaning of life in God, both the living being and God are aligned on their significances. When they are aligned, they view the world in the same way. To begin communion between the living being and God, alignment on the basic purpose of existence must be achieved. Religion's goal is to bring this alignment.

When a person changes the significance of his life to God, he gradually comes to know God's name, form, qualities and activities. People sometimes ask: can we see God before we even practice religion? And the answer is clearly "no". But, this is quite in line with how we gain material knowledge as well. We must first find physics significant before we can learn physics. Unless we are convinced that physics is significant we might sit in a physics class but will never pay attention to what is being taught because we don't find this knowledge relevant to us. Thus listening with rapt attention is one of the indicators that we find something relevant. Because the living being adopts God as the meaning of his life, he can never "merge" with God because if the *distinction* between life and its significance were lost, its significance would disappear.

### UNDERSTANDING VEDIC RELIGION

The difference between a religious and non-religious person is not a particular set of activities, morality, ethics or rituals that they practice, preach or propagate. The only difference between religion and non-religion is the alignment with God as signification. Thus, evolutionary theories of religion that claim to explain morality as endowing us with a better chance at survival are not really explanations of religion because the significance of such a theory is survival. Despite its sophistication, its advocate is stuck at a lower significance of life, namely survival.

Many people in this world work not for survival but for the sheer pleasure of discovering and knowing things, which is a higher significance than survival.

Religionists must have God as the significance before their morality or ethics can be considered true religion. In short, charity performed without reference to God is not religion. If the purpose of a charity is humanitarian then it is not a religious activity because its significance is the ideology of service to humanity. This is one of the crucial points in which Vedic thinking is radically different from any other religious thought today. It resolutely identifies God as the center, to the exclusion of everything else. Lord Krishna concludes in *Bhagavad-gita: sarva-dharman parityajya mam ekam saranam vraja* – "give up all sorts of religiosity and just surrender to Me". Earlier He asserts: *mam-anusmara yuddha cha* – "remember Me and fight as well". The prime ingredient of religion is not a particular activity (such as fighting) but affectionate remembrance of God during the performance of that activity. This remembrance must happen at a very subtle level as the significance of the activity.

The true religionist acts for God. The practice of religion is that we can transfer our significances from survival, security, love, appreciation and ideology to God. The study of significances and how these can be transformed is the subject of religion. Vedas prescribe that a person need not change duties of his current and prescribed social order. This is because religion is not activities, rituals, behaviors and customs. Rather, each ordinary activity when performed with the significance as God is religion. There are still activities and practices prescribed to help a person alter his significance. But, the performance of these activities does not demarcate religion from non-religion. Every activity that has God as its significance is religion. This continuous remembrance of God during the performance of ordinary activities is a radical conception of religion, somewhat unique to Vedas. With the remembrance every activity is religion. Without the remembrance, every activity is non-religious.

### MATERIAL TO SPIRITUAL

When we adopt a material significance (such as survival, love, and ideology) all our activities are in matter. When the same significance turns to



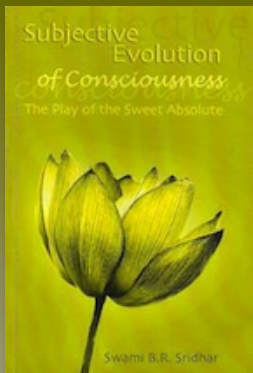
God our activities become spiritual. The point at which significance changes, is called "liberation" from matter. When significance changes, gradually the body, mind, senses and intelligence are transformed into those compatible with the new significance. A living being cannot know God with material senses, but with the new senses compatible with the new significance.

It is because of some significance that the living being enters the material world. Different grades of life in this universe are based upon different significances that living beings adopt. Thus a lion and a cow have different bodies and minds because they have chosen different significances for their lives. The Vedas prescribe that by altering one's significance, one can change his body because successive interpretations of reality follow the first interpretation in terms of significance. It entails a very deep point about Vedic philosophy - that body, mind, intelligence are all symbols, but ultimately purposeless in themselves. The purpose of these symbols is the existential significance of consciousness - the reason for which a person becomes conscious of some content. When this significance changes to God, then the meaning of mind, body and intelligence becomes Godly. Then, all these symbols become representations of God's personality and are said to be spiritualized.

In short, the dominant object for religion is the significance that a particular person finds in the world. Transformation of material objects is the goal of science while the transformation of deeper meanings is the goal of religion. By changing these deeper meanings in life, we can change our bodies from one species of life to another, and ultimately transform them from material to spiritual. The sensations, emotions and thoughts in these bodies are different. A living body and mind is developed based upon a significance that we attach to our lives, and we are free to choose this significance. The development of significance into a body is science but the choice of significance is religion.

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## Subjective Evolution of Consciousness

Evolution is generally thought of as something merely objective. But objective evolution is a misperception of reality. Evolution is actually based on consciousness, which is subjective. Subjective evolution, however, seems to be objective evolution to those who are ignorant of this perspective. Consciousness seems to be the unessential embedded in a concrete substance, but actually it is just the opposite. Consciousness is the substantial and its objective content or world is floating on it connected by a shadowy medium like mind. This view finds surprising support in advanced modern science from which physicists like Paul Davies have concluded that it is necessary to adopt "a new way of thinking that is in closer accord with mysticism than materialism."

The dynamic super-subjective living reality that produces as much as is produced by its constituent subjective and objective fragmental parts or moments is in and for itself the embodiment of ecstasy, that is forever beyond the static reification of materialistic misunderstanding. With an irresistible passion for truth, Srila Bhakti Raksak Sridhar Dev-Goswami Maharaja, the author of *Subjective Evolution of Consciousness* takes us to an incomparable synthesis of thought from Descartes, Berkeley and Hegel in the West to Buddha, Shankara, and Sri Chaitanya in the East to reveal the ultimate conception of reality in all its comprehensive beauty and fulfillment.

To obtain a copy of the book *Subjective Evolution of Consciousness* please contact us at:  
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