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Published Monthly

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WAKING FROM THE DREAM

by

Srila Bhakti Raksak Sridhar Dev-Goswami Maharaja

We find this verse in *Srimad Bhagavatam*:

avismrtih krsna-padaravindayoh
ksinoty abhadrani ca sam tanoti
sattvasya-suddhim paramatma-bhaktim
jnanam ca vijnana-viraga-yuktam
(Srimad Bhagavatam 12.12.55)

("For one who remembers the lotus feet of Krishna, all inauspiciousness soon disappears, and one's good fortune expands. In other words, one becomes free from all material contamination, one attains liberation from repeated birth and death, and one's real spiritual life begins. As one's heart becomes gradually purified, one's devotion for the Lord within the heart awakens, and one realized the *Paramatma*. Thus one gradually develops knowledge (*jnana*), realization (*vijnana*), and renunciation (*vairagya*).")

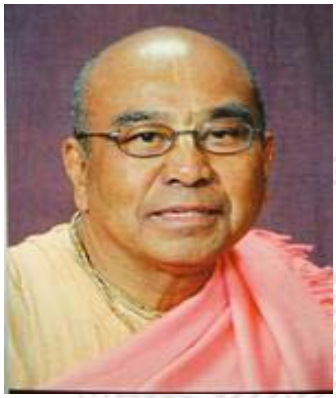
Krishna consciousness, remembrance of the divine feet of Krishna – *krsna-padaravindayoh* – will dissipate and destroy the *abhadra*, what is undesirable, what is not good in us. That which is nasty, which is impure within us, will be destroyed by the continuance of Krishna consciousness. In any stage of its development, even in its lower stage, its slightest, 'negligent' connection can destroy our undesirable connection with the things of lower nature. And, it will promote goodness within us: *sattvasya-suddhim*, the substantial character of our existence, will be improved; our soul-existence, that will be purified. Our standpoint, our understanding, our aspiration – everything, will be purified. And, *paramatma-bhaktim*: we shall attain devotion, attachment to the super-subjective realm; and our knowledge, our conception about that – *jnanam ca* – will improve. And that knowledge – the conception about Him – will develop to *vijnana*, a proper conception, and will effect in us *viraga-yuktam*, apathy to this mundane world.

At any cost, we are to maintain our Krishna consciousness. The advice is: try to maintain Krishna consciousness, it is *the* medicine. And there is no other medicine which can produce Krishna consciousness, which can cure our disease and discover Krishna consciousness within us.

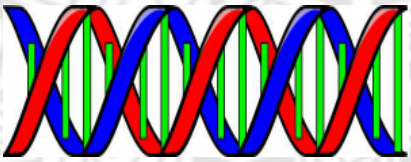
LIFE DISPLAYS UNIQUE QUALITIES

by

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



Cells are the fundamental units of living organisms. Those that function similarly make up the tissue, and a collection of tissues working together forms an organ. A collection of organs make up the organism. The coded instructions as to how each cell should function, is contained in the nucleus of the cells, as DNA. Units of DNA form genes and the collection of all genes is called the genome. DNA is systematically packed in different numbers of chromosomes in different species. Human beings have 23 which are found in almost every cell and 1 sex chromosome is found in gametes or cells responsible for reproduction. All the cells initially begin as embryonic stem cells in the young embryo. The unique feature of these stem cells is that they have the flexibility to become any type of cell. Though the genome is identical in every cell, studies of genes tell us that the activation of a different combination of genes induces the stem cell to specialize in a particular way, forming an organism with different types of cells.



DNA

From the second half of the 20th century, there have been astounding breakthroughs in the fields of genetics, genetic engineering and biotechnology. The discovery of DNA structure in 1953 by Watson and Crick has since led to significant advancement in these fields, namely, the synthesis of genes, discovery of restriction enzymes, cloning of animals, sequencing the genome of organisms and finally the human genome project which began in the year 1997 and concluded in 2003.

The history of modern genetics started from the garden of the Austrian monk Gregor Mendel (1822-1884). Patiently experimenting in the breeding of diverse kinds of pea plants, he demonstrated how their visible characteristics could be foreseen according to simple mathematical probabilities as they were passed on from one generation to the next. He proposed that hereditary information passed from parent to offspring in discrete packets, which he called "factors." Different factors were responsible for distinct aspects of a pea plant's appearance, such as seed shape or flower color.[1] However, the secret of genetic inheritance was unlocked in April 1953 when Watson and Crick proposed a double-helical structure of DNA. The era of molecular genetics in the field of biochemistry thus began.

Watson and Crick

Scientists, now knowing the molecular structure of the genetic molecule, could begin both to elucidate and manipulate its function. These new studies were, however, dependent on the discovery and use of the many enzymes[2] that are able to modify or join existing DNA molecules, or to aid in the synthesis of new DNA molecules. As methods of visualizing DNA were being developed in the 1950s, a new tool was discovered: restriction enzymes. Werner Arber identified the first restriction enzyme in 1968. Restriction enzymes are protein molecules that cut deoxyribonucleic acid (DNA) chains into defined fragments.[3]

Werner Arber

During an attack of an invading bacteriophage (virus that attacks/infects bacteria), the bacterium releases a so-called 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. It seems that even microorganisms have some sort of built-in intelligent system. The restriction enzyme of a bacterium cuts the viral DNA of foreign origin to safeguard and preserve its own identity. What a beautiful system nature has! Life displays such unique qualities even at the level of microorganisms.

References:

1. *Science -Pathways of Discovery,* edited by Ivan Amato, New York, 2002, p. 60.
2. Enzymes are a class of proteins serving as catalysts in biochemical reactions. Each enzyme is specific to a particular reaction or group of similar reactions.
3. Restriction enzymes make cuts in foreign DNA molecules at specific sites. The site at which a given restriction enzyme cleaves double-stranded DNA consists of a segment usually four to six nucleotide pairs long, called the recognition sequence. The recognition sequence is a characteristic of the particular restriction enzyme and dictates where the enzyme will cleave the DNA molecule. Some enzymes, such as HaeIII, cut both strands of DNA at the same point, generating blunt-ended fragments whereas many other enzymes, such as EcoRI, make staggered cuts, leading to fragments with complementary cohesive ends (sticky ends). Also refer to "Dialogue on Life and Its Origin", T. D. Singh and Werner Arber, *Savijnanam -Scientific Exploration for a Spiritual Paradigm,* the Journal of the Bhaktivedanta Institute, Kolkata, 2002, vol.1, pp. 9-15.

THE CONCEPT — Part 1 (of 3)

by

Sripad Bhakti Madhava Puri Maharaja, Ph.D.

In the following article I present some general features of the Concept that may be understood without resorting to dialectical logic. Primarily, it is intended for beginning students of Hegel's philosophy, and also to provide an intuitive grasp of the Concept for those who may be struggling to understand what Hegel means by this important term that is so central to the philosophical science of the Absolute. Hegel considered that Aristotle also analyzed the Concept without dialectics, so it is shown here how Aristotle was, in fact, dealing with the Concept in his own metaphysics.

Basically, it is concluded that an object is a unity of two essential determinations: (1) its being or that it is, and (2) its other determinations or what it is. This leads to understanding that the object is actually a subject-object unity or identity. The Concept is the concrete totality of these aspects and their relations, and provides a new foundation beyond empiricism for scientifically comprehending objects and objective reality in general. (You are invited to contact the author with questions or comments on this article.

The roots of the Concept can be traced back to the attempt to rationally solve the ancient problem of the One and Many (as presented, for example Plato's *Parmenides*). An object may be treated as one entity — a unity of many diverse aspects or elements, just as in the *Phenomenology of Spirit* Hegel dealt with the Thing with many properties. As simultaneously One and Many, the object or Thing is an existing contradiction, which the Skeptics claim makes it impossible to be real, while if we accept its reality we then have to determine how to comprehend it. In this way it becomes a very fundamental problem for philosophy. For this reason we are not surprised that in Hegelian philosophy, the Concept (*Begriff*), which in some earlier translations of Hegel's works is called the Notion, is recognized as having such a fundamental significance. It is essentially the way philosophy deals with this ancient problem.

Therefore, we want to have a good understanding of the Concept, not only to be able to make sense of Hegel's system, but also to realize the great innovation it brings to modern philosophy and science. In addition, the Concept is especially important in regard to the critique that it brings to the materialist empirical conception of reality that governs the philosophy of modern science. The contradiction of the One and Many that the Concept harmonizes has universal application when we consider it as the comprehension of the Universal - Particular relation in its unity or Individuality. In this form it has far-reaching consequences for science, philosophy, religion, nation-states and at every point in the study of reality and truth, as Hegel consistently demonstrates, especially in his *Encyclopedia of the Philosophical Sciences*. Therefore, in its most general form the Concept involves the moments of Universality, Particularity and Individuality, but instead of such abstract explanation, we will stick to the more concrete example of an object, which we hope will more clearly bring out the specific nature of the Concept. Hegel freely acknowledges his profound indebtedness to Aristotle's contribution to Western philosophy, which he considers to be greater than Kant's or any other philosopher's. We want to show here how Aristotle was actually concerned with the study of the Concept in a somewhat 'empirical' or, at least, immediate way. Because Hegel recognized the intuitive presence of the Concept in Aristotle's writings he took great interest in his philosophy.

Hegel

Aristotle, of course, was the foremost student of Plato, to whom Hegel also gives great importance. Therefore, it will be more useful to understand the development of the Concept from Plato and Aristotle to Hegel, than to explain its development from Kant, Fichte, and Shelling to Hegel, as is generally done in more recent books on the subject. G.R. Mure's *Introduction to Hegel* is one of the few exceptions in Hegelian studies that takes the Aristotelian approach seriously. Aristotle's thought was immensely detailed, but fortunately, for our purposes here, we only need to deal with some of the simpler and more basic concepts of his philosophy. In Western philosophy, Plato seems to be one of the first to clearly distinguish what he called the Forms (or Ideas) from their sensuousness or matter. However, these Forms do not exist in a world of their own beyond the sensuous realm, as Platonic Ideas are generally misconceived - as if philosophy had the task of trying to tie rocks to clouds. Rather Plato's Ideas actually were conceived as constituting the very essence of the sensuous material. In this way he recognized that Form or Idea is implicit to (hidden in) the sensuous content of knowledge. As one of the pioneers in this field Plato presented more of a description rather than a systematically developed conception of the relation of the Idea to its sensuous content (i.e. the relation of Universal to Particular).

Further advancement in that field was made by Aristotle. Hegel tells us that Aristotle's advance upon Plato's philosophy came through his introduction of the concept of inner teleology or entelechy, by which he made the attempt to enunciate the relation of Idea to content. In order to understand entelechy or *entelechia*, we have to introduce two other Aristotelian terms, viz. *energia* (actuality) and *dunamis* (potentiality). In some places, Aristotle also refers to these as Form and matter, which we will consider equivalent ways of referring to the same principles.

THE PERSPECTIVE OF THE OBJECT ITSELF

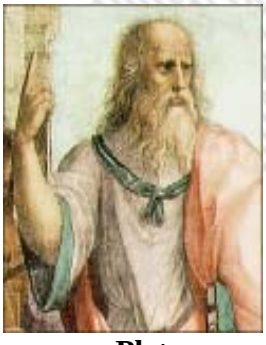
In order to bring greater clarity to the terms - *energia*, *dunamis* and *entelechia* – we may begin by considering an object as a unity of diverse elements. At first, the immediate object as an entity is only inwardly, implicitly, or potentially concrete, i.e. a totality. In other words, the immediate, non-spiritual, inanimate object is simply the concrete concept as real possibility, merely an inner, potential totality, which Aristotle calls the *dunamis*. In truth it is the unconsciousness of it as an absolute totality. As an explicit totality, i.e. in its consciously developed or mediated form it

is the actuality of the object or its *energia*. The mediate act or thought activity that connects *dunamis* and *energia* is the *entlechia*. We will try to clarify all of this in what follows.

In itself the concrete unity of the object is differentiated, where, because of its primary immediacy, the various elements form a mere diversity. Since the immediate object is self identical, its reflection into itself (its self-identity) is just the unity of its diverse elements, where this internal reflection gives it the character of a subject, so that the object is essentially both object and subject. The diverse elements are the objective side, and their containment within a unity is the subjective side of the object. In other words, the unity is implicit in the object -- its unity does not reveal itself explicitly or in sensuous form. This is the situation that obtains from the perspective of the object itself as an immediacy.

To help clarify the subjective aspect of the object we may note that a self-identity such as A = A, when applied to an object of diverse elements means that on one side of the identity we have the object as a one, and on the other side the diverse elements. The two sides are identical since it is considered one object. Because the oneness or unity of the diverse elements is paramount, the many diverse elements are contained in or by that unity, thus making the unity the subjective aspect (the implicit), with its objective content being the diverse elements. This is essentially what is implied by the reflection-into-itself or self-identity of the object. Unity implies that one element is united with another, which further implies an activity of conjoining the elements. Because the object is considered only in its immediacy, the activity uniting its diverse elements seems to lie outside of them, i.e. their true unity remains only implicit (subjective). This leaves causality as the only way that unity may be introduced at the immediate level, since immediate relationships are established by a necessity external to the diverse elements themselves (e.g. by a law of physics, etc.). This is a crucial point in understanding why Aristotle had to use various 'causes' to establish the unity of objective reality.

In summary, *dunamis* refers to the immediate, implicit, or potential totality of the object as simultaneously one and many, and *energia* refers to the actualization of that totality as Idea, i.e. the mediated totality that accounts for the relational activity or *entelechia* that unites the two terms. Hegel considered both Plato and Aristotle to be "Spekulative" thinkers since they conceived the totality of differences in their unity as Form or Idea. For Plato this unity remained generally at a descriptive level, while Aristotle analyzed the aspects of the unity in an almost empirical fashion, i.e. in their separated immediacy. It is because he maintained the perspective of immediacy that he could only combine or unite such elements externally, i.e. through the numerous causes he enunciated. This was, therefore, also the defect of his approach, which Hegel had to rectify by showing how the unity could be established in a completely mediated manner through explicitly developed "*Spekulative*" or conceptual thinking, i.e. by reason. Thus there are two levels of necessity implied here - the causal necessity of Aristotle, and the rational necessity of Hegel. Causal necessity is the form the Understanding applies to unity, and this supplies the groundwork for the higher grasp of the rational necessity of Reason. The realm of causality conforms to the Aristotelian logic (either/or) of immediacy or Understanding, while the realm of rational necessity is developed by Hegel using dialectical logic (simultaneous identity and difference).



Plato

SUBJECTIVE AND OBJECTIVE CONSCIOUSNESS

Before getting into the perspective of consciousness we want to distinguish two distinct aspects of this perspective, viz. subjective consciousness and objective consciousness. The thoughts or thought-determinations I have about an object, may be considered my thoughts or my determinations of the object, yet, they are also the determinations of other subjects besides myself. In other words, an object or thing is considered basically the same whether I am experiencing it, or others are experiencing it. Therefore, the determinations of the object must belong to the object as much as to the subject experiencing the object. The perspective that considers the determinations of the object to belong to myself as a finite subject among many other subjects is called the perspective of subjective consciousness. On the other hand, the perspective that considers that the determinations of the object belong to the object, since they are determined by all subjects to be the same, is called the perspective of objective consciousness.

The question then arises: what is objective consciousness? By "objective" in this case we mean "universal" - for example, the universal consciousness of God. In this case, thought is not merely the possession of the finite subject, but has its universal origin and ground in God. Only that thought which is universally objective, i.e. the same for all subjects, belongs to God -- not that every subjective thought or fancy that the finite subject has comes from God. Only that thought which is universally true belongs to God. In other words, thoughts that correspond with the object, and are considered true from every other subjective perspective, is Divine thought or Reason. We may consider such objective thought as the *noesis noeseos*, the thinking of thinking that Aristotle identifies with God.

In the section that follows we consider the perspective of subjective consciousness, in accord with the Kantian tradition. But the same result will hold for the perspective of objective consciousness or universal consciousness, because we are essentially dealing with consciousness and its object in both cases. Furthermore, we are considering that the thought-determinations of the subject actually correspond with the truth of the object. In this way also it corresponds to objective consciousness.

....to be continued