The Science of Happiness

M. A. Marchetti, Ph.D.

"Feeling and longing are the motive force behind all human endeavor and human creation, in however exalted a guise the latter may present themselves to us." – Albert Einstein

Modern science only studies that which is immediately given to our senses - that which we call matter. But there would be no such thing as science if there were only matter or existence. Science requires that in addition to existence there be cognition of existence, or consciousness. Without consciousness of existence, science would never come into being. Thus we must admit that at least two features of reality are necessary for scientific knowledge - (1) existence or being and (2) consciousness of existence.

But there is still a third feature of reality upon which the first two are dependent. We can call this satisfaction or the fulfillment of being. If there were mere existence without consciousness of existence, we could say nothing about such existence. But even mere consciousness of existence would also be a passive, indifferent existence. It is only because we seek satisfaction, fulfillment, and enjoyment that we create science, philosophy, culture, religion, etc. If there were no need for fulfillment or satisfaction then all these activities would never arise. There would be no need, no desire, no lack or negativity, and therefore non-differentiation.

Thus, it is this fundamental quality that characterizes life: it seeks satisfaction or fulfillment. It is from this basic quality that all activity arises. We can call this the Ultimate Principle of Reality. By

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inquiring into where this principle comes from and why it exists, we will be able to understand how to achieve the greatest satisfaction and happiness. It is this type of inquiry that produces what is called the science of happiness.

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Observation leads us to conclude that one specific and obvious quality of life is that it seeks to continue living. No one wants to die. Life struggles to maintain itself even against the greatest odds. Thus it appears as an inseparable and intrinsic principle that is basic to life. Yet there is no scientific law or biological theory that explains this principle. The law of conservation of mass and energy applies to matter. But matter, as we have noted, pertains only to immediate existence. Matter does not explicitly possess the

principles of consciousness and fulfillment that we find in living entities.

By understanding that satisfaction or fulfillment underlies the existence of all life, we can conclude that life struggles to maintain itself because it enjoys living. If enjoyment is obstructed or taken away from life, then life no longer continues to maintain itself. Even in the case of suicide, self-destruction is impelled by the same inherent quality of life that seeks happiness and fulfillment, but in this case is misconceived as being achieved by the negation of life instead of the negation of distress. Thus we can conclude that the conservation of life is based on the fundamental principle of fulfillment.

Another general quality of life we observe is that it exhibits an awareness or consciousness of its environment. When an ant confronts an object in its path, it goes around it and continues on its intended trajectory. A marble rolling down an inclined plane may encounter the same object and simply crash into it, bringing its forward trajectory to a halt. This brings us to recognition of another fact - the movement of the marble is produced only by an external force (gravity in the case of moving down an inclined plane), but the ant can stop at the obstacle and then start moving again by dint of its own automotive force.

This ability to move itself is a quality specific to life and thus living entities are referred to as animate, whereas non-living matter is called inanimate since it does not possess this automotive ability.

According to Newton's laws of physics, a body at rest will continue to remain so unless it is moved by an external body or force. These laws pertain to matter. Although the body of a living entity may also be made of matter, another principle seems to be involved by which such living bodies are automotively impelled; it is called free will

Now one may argue that an automobile is also automotive - it propels itself by consuming gasoline, just as a living entity consumes food to produce the energy by which it moves itself. But the automobile does not possess free will. It does not make choices to do anything. A driver is required for that purpose, and the driver, as a living entity, does possess free will.

So what is free will?

First of all, why do we call it free? Freedom means that it does not act by any other cause than that of its own self. Freedom means that it is self-determined, self-originated, and self-motivated. Another word for this concept is "spontaneous." It simply moves itself on its own. It does not require a force outside of itself in order to move. This is actually what we mean by animate: it animates itself. Such animate entities are called living, in contrast with those entities that do not spontaneously move themselves, which we call inanimate or matter.

Thus "free" refers to the fact that it is its own cause, it is the cause of itself, or it is self-caused. Whatever it does is caused by itself

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and not by any other cause external to itself. This is what we mean by free will, spontaneity, or animate, which is the symptom of a living entity. Inanimate matter is not characterized by these symptoms.

The activity within an atom may also be considered to be spontaneous or animate matter. The zero-point energy, or energy of the atom at absolute zero, may thus be considered spontaneous, but no one would claim that the atom exhibits free will. Thus while freedom is an essential principle, the will is also a distinguishing aspect of the explanation of life.

We have explained what we mean by freedom but what is the will?

Generally, the psychological or mental functions are distinguished by three categories: thinking, feeling and willing. These are also referred to as cognition, emotion, and volition. If you ask someone what they are doing when they think, most will find it very difficult to answer. Although it is something we do all the time, most people will not be able to explain what it is they "do" when they think.

The subject concerning the nature of "thinking" is a very difficult and deep one. Although we may consider it an activity, it is not the same kind of activity we refer to as when things move. The words "think" and "thing" have more than most of their letters in common. But at the same



time they are quite opposite in nature. In fact, we can say they are the negation of one another, or, in other words, they are negatively related. Things that are opposites are negatively related. For example, night and day, North and South, head and tail, positive and negative, etc.

We will not analyze what "thinking" is in this article, because it is a big topic on its own. But at this point, we will simply say that it is the negation of things. When we think a thing, the thing must be negated in order to become a thought, since the thought is no longer something material like the original thing. We can see and touch the thing with our external senses, but we cannot do that with the thought of the thing. It is in this way we can say that they are negatively related. Negation doesn't mean annihilated. The thing is not annihilated by thinking it. Negation thus refers only to the particular relation thinking has to things. In other words, in order to get from thing to thought we have to go by way of negation. It is in this sense that negation is being used. It is also in this sense that thinking is sometimes referred to as negative activity.

The subject concerning "feeling" or emotion is another very difficult and deep conception. All we will say in this article is that it implies a more practical or concrete sense of action than thinking. While thinking implies a non-material or abstract type of activity, emotion has the actual word "motion" in it. Hegel wrote that without passion or emotion, nothing great can be achieved in this world. So while thinking implies a more theoretical sense, emotion or feeling carries a more practical meaning. This is a very crude distinction, because deeper study of these subjects will reveal that both thinking and feeling are very intimately related.

Finally we come to willing or volition which is the third type of psychological or subtle activity. These are called subtle phenomena because they do not occupy space, do not have weight and are not detectable by the senses. Certainly thinking and feeling are intimately involved in willing, but the sense of practical activity is strongest in willing than in any of the other mental functions. As soon as we will something, activity is immanent. We may think and feel something, but acting on them can be checked by a strong will. On the other hand, when we will to do something, then it is very difficult to check it.

Observations of our inner self are called introspection or looking within. Thinking, feeling and willing are observed as being subtle or subjective activities within the self, distinct from the gross or objective activities of things outside ourselves. However, observation of inner experience is no less objective than that of outer sense experience. In other words, thinking, feeling and willing are universal or objective experiences since everyone can experience them. Although they are internally private experiences, as opposed to external public ones, nonetheless they can be experienced by everyone. In this way we can also refer to them as objective, and therefore they can be studied scientifically.

These considerations lead us to conclude that the inner world of mind has a differentiated structure that can be studied scientifically. The subtle or non-sensuous nature of the different types of activities or movements that are studied does not mean that they cannot be observed or experienced. In fact, it is because they can

be experienced and observed that we can call them material, i.e. they are the subject matter or content of consciousness, as much as the experiences of the senses, which are called gross (or sensuous) in order to distinguish them from the subtle (or mental).

There are five senses including smelling, tasting, seeing, touching, and hearing. In Sankhya philosophy the five senses are also connected with their objects that are called earth, water, fire, air and ether, respectively. Those elements that are observed or detected by the senses are called the gross material elements. In addition to these five gross elements Sankhya philosophy specifies three subtle elements called mind, intelligence and false ego (manas, buddhi, ahamkara). We have already mentioned that the mind is characterized by the three functions of thinking, feeling and willing. The intelligence is the discriminating faculty. The false ego is the identification of the conscious self with the gross and subtle material elements.

It is important to distinguish the real self from the false ego. As previously mentioned, whatever is observed or experienced is called matter. Above matter is the consciousness that is observing or experiencing. Because it is above matter it is called non-material. In other words, we experience the "seen" but we don't experience the "seer." We experience the "known" but we do not experience the "knower." The self, the consciousness, the seer, the knower - all these refer to a different category than the objects that

are observed or experienced, i.e. the things that are seen, known, etc.

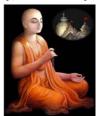
At a higher level of spiritual development one can also experience the self or consciousness, in which consciousness becomes object to itself. This is called self-consciousness or the self, and is experienced when thought can think itself. Aristotle identified this stage as pure form without matter or in Greek, noesis noesios. This is a higher stage of experience and is called spiritual, to distinguish it from the ordinary experiences of material phenomena. When consciousness is conscious of itself, when thought can think itself, then we enter a world that is non-material, and which no longer deals with the duality of observer and observed. In the spiritual plane observer and observed are simultaneously one and different. The subjective self is objective to its own self. This is possible to achieve by cultivation of the science of the self. In other words, the scientist or subject is also to be studied along with the objects of science. This is lacking in empirical science, but only by including this higher experience of the self can we have a complete scientific understanding of reality.

The spectrum of electromagnetic radiation extends well beyond the range of visible white light. In a similar way the spectrum of experience extends beyond the material to the spiritual. Thus to limit scientific investigation to the merely material range is like arbitrarily cutting off the spectrum of all experience. There is no reason for this. The science of spirit is well known and extensively studied in the Vedas and its corollaries. It has a much longer history than modern material science. The problem is that modern

is overcome in the spiritual realm where there is simultaneous identity and difference of subject and object. This means that the content or object of consciousness is not merely object but is of the same substance as consciousness itself.

Around 1500 AD the great spiritual revolutionary, Sri Chaitanya

Mahaprabhu, taught this principle as acintya bedha abedha tattva - simultaneous difference and non-difference. We find this principle is present in consciousness that is conscious of itself, or object to itself. Thus it is pure consciousness or cit-shakti. This spiritual existence is distinguished from the material sphere in which the object of consciousness is



non-conscious or material. Of course, even in the material world consciousness of a living being or human being is also consciousness of a consciousness. This is partial spirituality in the sense that we are also conscious of the material or non-conscious body of the living entity. But in the spiritual plane, everything is made of the same conscious principle. One has to study the science of consciousness very carefully in order to come to that platform.

Although this type of knowledge is not taught in the science classes, it is not lost to vedantic science. For instance, in the Upanisads we find the following verse:

asato ma sad gamaya tamaso ma jyotir gamaya

science has taken the world by storm, and the study of the oldest science has been gradually ignored and forgotten. Yet, because the spiritual range of experience is always part of complete spectrum of reality, we can only ignore it for a limited time before we begin to recognize that something very fundamental is missing in our attempt to understand the world and ourselves within it.

All of these considerations are important in understanding and developing the science of happiness. In the above mentioned description we have noted that the self is a non-material principle -a spiritual entity or spirit-soul. It is a pure identity that is to be distinguished from all matter including mind, intelligence and false ego, as well as all sensuous being. But this gives us only a negative definition of the soul. How are we able to understand what kind of world the spiritual soul lives in? Only then will we be able to understand what kind of real happiness the real self can enjoy.

Matter was described as what is experienced by us - what is observed, what is the object of consciousness. The spiritual is the experiencer, the observer and the subject. If the spirit-soul is to have any life, it may seem that its world cannot be experienced or observed by it because it would then become material. Then what kind of world does it live in?

As we mentioned previously, consciousness can experience itself; the subject can become object to itself. Thus what is spiritual can be object to itself, and this means that a spiritual world must exist in which the object is spiritual and the subject is also spiritual. The duality of observer and observed that we have in the material world

mrityor ma amritam gamaya

Translation: "I am within the realm of transient existence; take me to eternal existence. I am in the darkness of ignorance; take me to the light of knowledge. I am suffering and in misery; guide me toward joy and happiness."

Here we see the three features of existence, knowledge and happiness clearly articulated. Likewise, in *Sri Brahma Samhita*, Ultimate Reality is described as *sat cit ananda vigraha* - having the form of eternal existence, knowledge and bliss. Thus these three principle features of reality were recognized and clearly determined by the ancient vedantic scientists.

But beyond the individual's existence, knowledge and fulfillment there is also the whole world of spirit of which the individual is but a part. That complete whole spiritual reality or truth is also made of the same conscious substance as the individual, and that conscious being is denominated as Krishna in the *Brahma Samhita*, and other Vedic literatures:

isvara parama Krishna sat cit ananda vigraha

anadir adi Govinda sarva karana karanam

It is also confirmed in the first aphorism of *Srimad Bhagavatam*, which is the natural commentary on *Vedanta-sutra*, that the ultimate reality is a supremely cognizant Being:

janmadasya yato 'nvayad itaratas chartesu abhijna svarat

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Thus the same qualities that are found in the parts and parcels of the spiritual world are certainly present in the Complete Whole that consists of the same conscious substance. It is for this reason that the Absolute Truth or Ultimate Reality is not only Substance, but

Subject, which is denominated as Krishna, the ultimate resting place or ground of all existence, and from which all existence has its origin. All cognitive potency or consciousness can only have its origin consciousness. No one has ever explained how consciousness can possibly unconscious



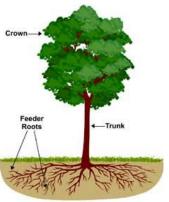
ŚRI BRAHMA-SAMHITĀ

substance. Why try to establish such an unnecessarily difficult and impossible scenario?

Likewise, ananda or fulfillment has its origin in the Absolute Subject only. Because of the reciprocal relation between part and whole, the whole imparts its qualities to the part, and the part expresses the qualities of the whole. In this way true happiness can be realized in the relation of the infinitesimal part to the Complete Whole. This principle is amply manifested in Nature.

Nature, as the externality of spiritual substance, has spiritual potency implicit within it. Absolute Subject or Spirit implies the existence of reason or a rational system. A system means that its intrinsic parts are organized according to a unitive principle or rational necessity. This principle may be called End or Purpose, that permeates the parts individually in an overarching unity, without merging them into an undifferentiated monism, i.e. an oneness without difference. Rather each part is mastered by the unitivity of the system that holds the system together as a system.

Thus we find, for example, that watering the root of a tree will supply water to all its leaves and branches. On the other hand, water applied only to any of its other parts will cause the tree to die. This means that a specific system exists in the plant, and without proper knowledge of that system, fatal results can follow. Food nourishes the body, but only if given to the mouth (or the



stomach), not to other parts of the body. I nus understanding the proper system is essential for realistically achieving satisfaction.

Through an ontological study of consciousness it can be shown that there is a relation of the innumerable conscious living entities to the independently conscious Absolute Whole. A scientific understanding of their relationship thus proves necessary to achieve actual satisfaction. This system is elaborately explained in the Vedantic literature and commentaries of the vaisnava teachers. Sufficient details are provided to systematically develop both the principles and technical application of such a spiritual science.

Science should not be limited merely to the study of impersonal mechanistic processes that have nothing to do with life. Life is a more essential subject for scientific understanding than matter, yet matter has taken central interest in science. This imbalance has to be corrected, and in the natural course of development of human knowledge the scientific study of life is now being considered the next frontier that will complement our knowledge of matter.

Life and Its Deeper Reality

Phalguni Banerjee, M. Tech and P. Suresh Kumar, M. Tech

What Modern Science Does Not Know!

Science Magazine in its 125th Anniversary Issue came up with the title "What Don't We Know?" where it listed 125 crucial questions facing science over the next quarter-century. A major question of

foundational importance that is listed is, "How and Where Did Life on Earth Arise?" Some of the other interesting questions that were listed are, "Can the Laws of Physics Be Unified?", "What Determines Species Diversity?", "How Will Big Pictures Emerge



from a Sea of Biological Data?", "How Far Can We Push Chemical Self-Assembly?", "What Are the Limits of Conventional Computing?", "Do Deeper Principles Underlie Quantum Uncertainty and Nonlocality?" and "What is the Biological Basis of



Consciousness?" The magazine also noted the statement of 2004 Nobel Laureate in Physics, David Gross, that "Fundamental questions are guideposts; they stimulate people." Thus hundreds of years of the glorious history of modern science have failed to provide any satisfactory answer regarding life and its deeper reality. Science without knowledge of the scientist (life) who is exploring Nature is thus incomplete.

Vitalism: A Mistake in the Basic Conception

The theory of vitalism has its roots in ancient thought. This theory is opposed to any mechanistic conception and claims that the functions of a living organism are due to a special or a vital priciple that is beyond physical and chemical forces. Many scholars have suggested that vitalism can be found in the works of Aristotle and many other great philosophers of the world. Generally vitalism proposes self-causation or self-determination. Many ancient