Life-Force Energy: A Step Beyond Physics

What we speak of as the "life force" in everyday conversation is not recognized by mainstream science. Biophysical studies of energetic processes within the cell examine visible physical correlates of the life force, but not the life force itself. Science cannot directly observe or measure life itself, so science does not (yet) view it as a legitimate part of nature. Notions such as the "elan vital" proposed by Henri Bergson a century ago or, more recently, Rupert Sheldrake's "morphic fields," which attempt to account for the self-organizing and self-maintaining properties of living organisms, are discredited by conventional science.

Yet the energy of life is so much a part of us, and so obviously present, that it would be absurd to deny its existence. We can feel cared for and loved by another human being, even if we are not directly touching the person. Our own life-energy level fluctuates according to whether we are sick or well—or during the day from morning to evening. That we work off excess energy through exercise or take in life energy from sunlight and food seem obvious. Still, the energy we are so intimately in touch with doesn't seem to fit easily into one of the four categories of energy permitted by physics: electromagnetic, gravitational, and strong and weak nuclear forces. It appears to be something else. Our lack of understanding of what the life force actually is remains a colossal mystery. It is a case of science ignoring the obvious because it does not know how to get a handle on it.

In his book *Beyond Biofeedback*, Elmer Green makes an interesting statement: "Some energies have not been detected with scientific instruments because these instruments have no parts above the physical level. Humans have all the parts and can therefore detect a greater spectrum of energies."

While our present level of technology does not have apparatus that can detect the life force directly, apparently our human perceptual faculties do. We have "the parts above the physical level," in Green's terms, that enable us to perceive energies and forces that are seemingly "above" or "outside" the physical level as we presently understand it. What those "parts" are, however, is not clear, although one finds references in the esoteric literature (the works of Rudolph Steiner, for example) to "subtle senses" or "subtle sense organs," but that really does not tell us much. Yet it seems evident that some human faculty has the capacity to detect energies that are ostensibly beyond the physical (or biological) level. The irony is that everyday common sense takes life energy for granted as an intimate aspect of all living things, not something apart from nature.

Throughout human history, it is only been the Western scientific worldview that has neglected to explore and examine the life force in detail. Names for this force abound in other cultures, ranging from *ankh* of ancient Egypt to *ki* or *chi* in Japan and China, and *prana* in India. Several ancient societies mapped out the distribution and flow of life force throughout the body thousands of years ago. The Chinese acupuncture meridian system and the eastern Indian *nadi* and chakra systems are probably the best known. Both of these systems worked out very elaborate and detailed pathways along which subtle life energies flow throughout the body.

In recent times there have been a few preliminary attempts to investigate these ancient systems in an objective manner. A Japanese scientist, Hiroshi Motoyama, has developed a device that apparently has succeeded in locating and measuring energy flow through acupuncture meridians (Motoyama, 1981).fgf Using this device (called the "apparatus for meridian identification"), Motoyama has identified streams of ions flowing in the interstitial layer of tissue just beneath the surface of the skin. What is remarkable is that these streams of ions correspond exactly with the location and distribution of acupuncture meridians mapped out thousands of years ago. It's important to recognize that these electric ion streams are not equated with life-force energy in and of themselves. Rather, they are physical markers that appear to parallel and mirror the flow of subtle energy. The strength of chi measured by an acupuncturist's pulse diagnosis corresponds exactly with the strength of charged ion flows measured by Motoyama's device. So we have some preliminary evidence for the existence of a subtle life-force energy and the channels of its flow identified long ago by Chinese medicine. The exact nature of this energy, however, and its relation to physical, electromagnetic energy, remains a mystery at this time.

Motoyama has also developed a device, which he calls the "chakra instrument," for detecting and measuring the activity of the seven chakras. Chakras are major energy junctions or "centers" that have been a part of Indian spiritual practice and Ayurvedic medical theories for 3,000 years. A fairly detailed understanding of the chakra system has been well-received (as part of the energetic anatomy of the person) in the West over the past

forty years. Motoyama's chakra instrument is able to detect the numbers of photons (units of light) being emitted at the location of the chakras. Meditators and yogic adepts who have "awakened" their chakras appear to emit much higher numbers of photons than an ordinary person. Also, by concentrating one's focus on a particular chakra, one can greatly increase the number of photons it emits. Again, in examining photon emission, the device is looking at an electromagnetic correlate or marker of subtle life energy—not the energy itself.

In recent years, certain progressive scientists, at least in some quarters, have had some success observing not subtle energy itself, but at least electromagnetic signatures of it. Mainstream science has, to date, simply ignored these initial findings. This trend should change, as more research appears and funding for such research increases.

While Eastern medicine has explored centers, points, and channels of flow of life force directly associated with physical body, Western metaphysics, drawing from Eastern concepts, has described an energy field, or "energy body," surrounding the physical body. This field is sometimes referred to as the human aura. A more recent, quasiscientific term for it is "biofield." This field can change in relative size, intensity, or even color. Scientific instruments can easily detect electromagnetic fields surrounding living organisms and, in fact, inanimate objects as well. What they cannot detect, however, is so-called "subtle anatomy" such as chakras and meridians. Nor is it possible to scientifically detect colors in the biofield associated with emotional states and personality traits, as claimed by intuitives. Yet thousands of intuitive individuals commonly report "seeing" colors

around people that reveal their emotional states and personality. What do we make of this?

It certainly appears to be a form of intuitive or paranormal <code>knowledge</code> outside the compass of ordinary sensory-based observation and knowledge. Consensus among independent intuitive observers of such phenomena might well be accorded credibility, much in the same way inter-observer agreement among scientists bestows credibility on empirical knowledge. Specifically, with respect to the human biofield, the "objectivity" of any observations about a particular subject gain credibility when several independent intuitive observers can agree on the intensity, quality, and colors of that subject's biofield. (Popular New Age healers, such as Rosalyn Bruyere and Barbara Brennan, have done interesting work in this area (Brennan).

What is the ontological status of subtle fields surrounding human beings? It's clear that the electromagnetic fields around the body (as well as ion-mediated charges conducted by neurons) are a measurable part of the physical world. However, more subtle phenomena, such as chakras, meridians, or auric colors, are a different matter. Are they physical or nonphysical? Are they *supraluminal* (faster than the speed of light) components of some physical (electromagnetic) form of energy—or something entirely different? How do such fields relate to physical space?

Intuitives identify a fine structure of the biofield. In esoteric traditions from Vedanta to theosophy, the biofield is often said to consist of different "levels" or different "subtle bodies." Acupuncture meridians and chakras

refer to the first level, often called the "etheric body." Other levels proposed by esoteric literature include subtle (astral), mental, causal, and spiritual levels or bodies (Besant, 1885). These various levels are not separate but interpenetrate and merge with each other. They can be understood to be simply different frequency bands (somewhat like different frequency bands on a radio), each of which is progressively more refined or "higher frequency." It is commonly proposed that the different levels vary only in their relative vibratory rates. The notions of vibratory rates and frequencies seem to imply that these various levels consist of some kind of energy. However, it does not appear to be any known kind of physical energy as we would ordinarily understand energy, since these levels or domains exist independently of the four types of forces known to physics. Except for the etheric body, they even appear to transcend physical space. They appear more related to the "interior aspect" of the world associated with the mind, psyche, and consciousness.

Life is not mere vitality but an *ordered*, *self-directing*, *intelligent* vitality. From where does this order and intelligence derive? Modern science would maintain that the physical brain, with its myriad numbers of electrochemical and biochemical reactions, is inherently intelligent, with consciousness as a derivative or even extraneous phenomenon. No one as yet, though, as adequately answered how brain physiology and biochemistry can produce purposive intelligence. So the question remains, does the physical body, *as a purely physical phenomenon*, self-organize and intelligently direct itself? Or does it *depend on more subtle domains as its matrix*—what esoteric literature speaks of as the 'subtle,' 'mental,' and 'causal' levels—in order to maintain and direct itself?

All of this remains speculative until we develop a "science" of consciousness, or, if not a science in the strict sense, then *at least a cross-cultural investigative discipline that can reveal subtle aspects of consciousness in a reliable, consensual fashion.*

The question still arises: What kind of "stuff" (if any) is the life force made of? Is it a supraluminal frequency of some physical form of energy, such as electromagnetic energy? If so, this would require a radical revision of current physics, which, following Einstein, has maintained that the speed of light is the speed limit for all known phenomena. (One yet-to-be-proven interpretation of nonlocal phenomena in physics, such as the ability of one electron to affect another at a distance simultaneously, is to assume there are indeed supraluminal processes.) If not a supraluminal form of electromagnetic energy, then whatever the life force is composed of must represent an altogether separate type of energy or energy field apart from the four basic forces that make up the three-dimensional world as we presently know it.

Are the "subtle bodies" (astral, mental, causal) spoken of in the esoteric literature the matrix of the life force? If so, we are left with a deep paradox: How do so-called subtle bodies (as well as subtle entities such as spirit guides or angels) get anything done? How do they order and orchestrate life? How do they *act* or do things and yet at the same time exist outside of three-dimensional space? As the philospher Kant recognized long ago, it's pretty difficult for us to imagine how anything can *do* anything outside of space and, even more so, time. Nonspatial "doing" is hard to imagine.

Action without duration (time) is even harder to conceive. Perhaps in this century or the next, physics will be able to provide a coherent account of a multidimensional universe in which both spatial and nonspatial dimensions exist and interact.

Brief Descriptions of the "Subtle Bodies"

Though at this time they remain highly speculative, it is worth examining the nature of the various proposed "subtle bodies" (that might form the foundation of the life force) as described in the literature. The following descriptions are drawn from a variety of sources ranging from early accounts by theosophists such as Rudolph Steiner and Annie Besant to a modern account presented by physician Richard Gerber in his book *Vibrational Medicine*. (Gerber, 2001). Keep in mind that a future science of consciousness may dispense with the notion of subtle "bodies," as the notion of some kind of invisible, nonphysical *body* is paradoxical, if not contradictory. Perhaps the concept of "field" will be used instead, so that we may speak of subtle fields, perhaps along the lines of Sheldrake's morphic fields (Sheldrake, 1981) that subtly orchestrate and direct life processes. One advantage of the concept of a "field" is that it may be able to straddle both sides of the fence between physical phenomena and consciousness.

Etheric body (field)

The etheric body is an invisible duplicate of the physical body that is thought to exist at a "higher frequency" than the physical body. It functions as a matrix or template for the development of the physical body. Sometimes it's referred to as the "etheric double."

In Ayurvedic medicine, the etheric body is described in terms of prana, nadi, and chakras. In Chinese medicine it's described in terms of chi, meridians, and points along meridians that can be manipulated to increase the flow of chi.

Rupert Sheldrake (1981) refers to something like the etheric body of an organism as a "morphic field." The establishment and maintenance of persistent organization of all living things -- from single cells up to complex organs like the brain, as well as entire organisms -- is governed by these morphic fields. For example, during fetal development, cell differentiation into various types of cells is governed by the individual's unique genetic code. However, the etheric body "template" serves to guide the various different types of cells in the emerging fetus to their appropriate spatial locations. Conventional biologists reject Sheldrake's notions and propose that morphogenesis will eventually be explained through the operation of purely mechanistic processes. Clairvoyants who claim to have observed fetal development maintain that they can "see" the etheric body appear early in pregnancy and then observe it function as a "mold" that guides the development of the fetal body.

The etheric body has never been photographed directly. Yet there is indirect evidence through the "phantom leaf" effect. It is possible to amputate the upper portion of a leaf, destroy the amputated portion, then electrically photograph the remaining leaf. The resulting image reveals the fully intact leaf as it appeared before the upper portion was amputated. The portion of the leaf that appears where it should be missing is called the "phantom leaf," much like a phantom limb that amputees experience. It is believed to reflect the etheric body or template of the leaf. Some scientists have disputed the phantom leaf effect and claim that it is an artifact of the particular photographic technique (called Kirlian photography) used to capture the effect. If such an effect is able to withstand scientific scrutiny, however, it is the most direct evidence available for the existence of something like an etheric body.

The etheric body also assists cells to reassemble in the appropriate configuration during wound healing. It helps the normal cellular reproductive systems to direct the right cells to the right locations in order to fill in missing tissue.

Of course the existence of the etheric body is controversial. Mainstream medicine and biology maintain it is simply a "convenient fiction" invoked to explain processes that science will eventually be able to account for. The question is *how* science will perform this feat, since what we readily perceive and describe as the "life force" does not lend itself to explanation in terms of electromagnetic or any other known physical forces.

Astral body (field)

The astral body provides the basis for the *qualitatively experienced* aspects of our feelings. While on a physical level, emotional reactions are identified objectively with the activation of limbic brain centers and the autonomic nervous system, the *subjective*, *qualitative* aspects of our feelings (the qualities we actually experience when we feel sad, happy, anxious, angry, and so on) reside in the so-called astral energy field, or body. Such qualities cannot be objectively located anywhere in physical space.

The astral body is not as strongly attached to the physical body as the etheric body, and appears able to move around somewhat independently of the physical body. Robert Monroe's out-of-body travels are sojourns of the astral body (Monroe, 1994). A part of human consciousness appears able to move into the astral body and can then move about in the dimension in which the astral body "resides." This can happen while one is awake in the form of out-of-body experiences but is believed by many to be especially common at night during dreaming.

During a near-death experience, consciousness may withdraw into the astral body. Thus a person is able to observe their physical body (perhaps being resuscitated) from a remote vantage point. Often the individual is able to report, after they are revived, the specifics of procedures done on their "lifeless" physical body, which they couldn't have possibly seen with their actual eyes.

If we accept the existence of the astral body, then emotional disturbances are due not only to neuroendocrine imbalances in the brain, as proposed by neuropsychiatry, or to etheric body disturbances addressed by

acupuncture, homeopathy and, more recently, "energy psychology," but also to disturbances in the astral field or body itself. There are probably reciprocal influences, both "top-down" as well as "bottom-up," among the various levels of the human energy system. Just as faulty beliefs and irrational thoughts can work down to the emotional, etheric, and physical levels, so physical imbalances in the nervous, endocrine, and immune systems can work upstream to affect the subtler levels.

At death, the astral body (and any subtler bodies that inform it) detaches from the physical and bioetheric bodies and continues to have an existence on the so-called "astral plane" (from theosophy), what is usually referred to as heaven (or hell) in Judeo-Christian tradition, Summerland in many of the Native American traditions, or the bardos in Tibetan Buddhism.

Dualism still exists at the astral level. Less advanced souls (in an evolutionary sense) are believed to reside at "lower" astral levels, while more advanced/evolved souls reside at "higher" astral levels. Many different spiritual philosophies believe in the notion of *multiple levels* of the astral dimension. Those that propose there are demons (for example, Emmanuel Swedenborg and fundamentalist Christianity) consign them to the lowest astral levels, otherwise known as hell, Hades, or the underworld.

Mental body (field)

This is the realm of language, intelligence, and, at higher levels, intuitive wisdom. Objectively, the left hemisphere of the brain is responsible for these functions, but our *subjective experience* of thinking, problem-solving,

and both deductive and inductive logic exist at the level of the mental body. Metaphysically, the mental level of reality is involved wherever intelligent order exists, from atoms to galaxies, as well as nonphysical beings such as angels. In Sanskrit, the entire spectrum of this intelligent order is referred to as the *manasic* plane.

The mental body is powerful because it is the seat of one's core beliefs and assumptions, which have an enormous influence on one's perception, emotional life, and behavior. Mind, according to Edgar Cayce, is "the builder." The beliefs we hold about ourselves, others, our environment, and life in general, largely create the reality we inhabit.

Psychopathology—emotional and behavioral disorders—often have their origin in the mental body. Mistaken, fear-based beliefs at this level create various kinds of emotional imbalances and conflicts in our astral/emotional body, which can ultimately work their way down to physical illness. Modern psychotherapy often emphasizes a cognitive approach: changing dysfunctional beliefs about self and others is assumed to help promote both emotional and physical wellbeing. But on the other side, psychotherapists also encourage people not suppress or repress their emotions through excessive rational control, which can lead to conflict and illness. Free expression of feelings (in an appropriate fashion) is important for health and wellbeing. Wholeness depends on an integration and right balance between the emotional (astral) and mental bodies.

Causal body (field)

The causal body is a close counterpart to what has been called the soul.

It's called "causal" because, from the level of the causal body, or the so-called causal plane, it is possible to see the "true causes"—the *spiritual causes*—of ailments as well as outer events. In indigenous cultures, shamans treat illnesses at this level. When we speak of the "condition of a person's soul"—whether it is open or closed, fearful or love-based, innocent or malevolent, hopeful or crushed—we are referring to the level of the causal body.

The deepest desires of our soul, even if they have an emotional component, originate at the causal level. If we hold to those desires and deeply believe in them, they will tend to manifest down to the mental, emotional, and physical levels, as do all causes which begin at this level.

When we ask the question, what is the higher purpose?—of this illness, mishap, or negative event—we attempt to evaluate the situation from the causal level. The causal level has to do with the "larger" or spiritual purpose of events rather than the ego's perception of them.

It is the causal body that contains a record of all that has been experienced in one's current life as well as in other lifetimes, forming the basis for experiences that come to light in past-life regressions. The causal body is the ultimate basis of our individuality, but it is beyond the ego identity of this lifetime or any other.

Unresolved experiences carried from one lifetime to the next (such as traumatic imprints, conflicts, or guilt about wrongdoings) are retained by the causal body. In Vedanta teachings, these unresolved experiences and

the patterns of behavior they result in are called *samskara*. Sometimes these samskara can have physical manifestations in the body in the form of birthmarks or illnesses; sometimes they have emotional repercussions in the form of particular fears or phobias that appear seemingly without cause at an early age.

The symbolic or larger meaning of what happens in one's life occurs at the causal level. Often this is also called the *archetypal* level. This is the vantage point from which we search for the "higher purpose" or "karmic purpose" of events. Learning to interpret the symbolic meanings of dreams is one way to access this level. We can also analyze wakeful experiences in the same way.

A common belief is that "we can create our reality." If we truly wish to manifest a personal intention, it must be held at a place deeper in our innermost being than just the mental level. When one holds an intention consistently at the level of one's soul or causal body, it has a greater likelihood of manifesting (especially if it is in harmony with the rhythm or flow of universal, archetypal forces and does not conflict with personal karma or anyone else's karma). Miracles originate from the causal level or from even higher levels.

Celestial or spiritual body/realm(s)

The spiritual body is one's divine "spark" or template. It is that innermost, deepest part of one's being that is pure love and radiance and is indistinguishable from the Godhead. It is that "piece" or part of God that

projects through one's individuality. It is eternal and entirely indestructible. When Jesus said, "I am the Light of the World" and "the Father and I are One," he was totally identified with his spiritual body. Any of us can do the same, and when we do, we may experience mystical states of awareness or "cosmic consciousness." *A Course in Miracles* speaks of this level in the statement, "Let me not forget myself is nothing, but my Self is all."

The celestial or spiritual realm is beyond all polarities and dualities. It is the "residence" of angels, archangels, and other angelic entities spoken of traditionally as Thrones, Dominions, Powers, Seraphim, and Cherubim. These beings (and numerous others, with various names depending on one's religion) exist in complete resonance and alignment with the Godhead or Ultimate Ground, so their "activity" can be said to be the same as or identical with the Cosmic Expression, Flow, or "Movement" of the Godhead.

The Celestial Level is the highest level at which the Godhead is differentiated or divisible. The goal of spiritual evolution, through countless incarnations, is to return to this level.

Ultimate level

The ultimate level, referred to in Buddhism as the Void, is beyond all form and differentiation. It cannot be described or conceived. However, the most profound mystical states of which humans are capable—those where one's ego entirely dissolves into the One—are said to provide access to it. It is the

wholly transcendent aspect of the Godhead prior to any differentiation. In the Tao Te Ching, Lao-Tzu describes this level in these terms: "The name that can be named is not the eternal Name. The Nameless is the origin of Heaven and Earth." Very little more can be said about it.

The status of these various subtle bodies or fields within the human biofield remains controversial at best. Although long established in esoteric traditions such as theosophy, they have largely been ignored by mainstream science. They are presented in this essay not as a definitive statement of the nature of reality, but as intimations of where we might look for an understanding of the life force and ultimately consciousness itself. Living creatures clearly have capacities not adequately explained by present-day physics and biology, such as self-organization, self-maintenance, and intentionality. Whatever force or field is responsible for these properties will ultimately be explained through a deeper understanding of the various domains or dimensions of consciousness.

Conclusion

The "energy" of life cannot be fully explained in terms of the four known forces of physics: electromagnetism, gravity, strong and weak nuclear forces. Ancient healing arts such as Chinese medicine and Ayurveda have studies the distribution and dynamics of the life force—referred to as chi and prana, respectively—in great detail, providing models to explain how it works in both health and disease. Some initial correlations have been

found between measurable biophysical phenomena and these ancient models: ion streams correlate with acupuncture meridians and photon streams with the physical locations of chakras. Yet our knowledge remains rudimentary at best. A model of multiple bodies—or perhaps better, fields—within the human biofield (etheric, astral, mental, causal, and celestial) provides an intriguing (though provisional) way to connect the physical body to the more subtle, non-physical substrate or substrates of the life force. This particular model originated in ancient Vedanta philosophy, was carried forward by theosophy, and has been utilized by Ken Wilber in his developmental theory of consciousness (Wilber, 1996).

On the surface, the life force seems obvious to us in our everyday experience. Yet a full conceptual grasp of what it is, where it originates, and how it interfaces with measurable bio-physical processes in the body awaits future breakthroughs in our understanding.

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