

# WHITE PAPER

## Table of Contents

<b>INTRODUCTION .....</b>	<b>1</b>
<b>OVERVIEW .....</b>	<b>1</b>
<b>ERRORS IN THE FOUNDATIONS OF PRESENT ELECTROMAGNETICS THEORY .....</b>	<b>1</b>
<b>A BRIEF OVERVIEW OF HEALTH AND DISEASE .....</b>	<b>22</b>
<b>THE PULSOR® .....</b>	<b>26</b>
<b>MODERN POLLUTION OF THE SCALAR AURA OF BODY .....</b>	<b>29</b>
<b>TYPICAL USE OF THE PULSOR .....</b>	<b>34</b>
<b>NOTES AND REFERENCES .....</b>	<b>36</b>
<b>A PARTIAL GLOSSARY.....</b>	<b>50</b>
<b>LT. COL. THOMAS E. BEARDEN .....</b>	<b>66</b>
<b>BLOOD CHEMISTRIES RESULTS.....</b>	<b>67</b>
<b>EPILOGUE .....</b>	<b>68</b>

# WHITE PAPER

By Colonel T. E. Bearden,  
September 15, 1985

## THEORY OF PULSOR<sup>®</sup> OPERATION

### INTRODUCTION

#### **Purpose**

It is the purpose of this paper to advance a general scalar electromagnetics (electrogravitation) theory of the Pulsor<sup>®</sup> and explain its operation.

#### **The Pulsor<sup>®</sup>**

The Pulsor<sup>®</sup> is a resonant scalar field device invented and developed by George Yao. It essentially consists of millions of specially designed and processed microcrystals in a suitable plastic container.

Depending upon the sizing and processing of the microcrystals, Pulsor<sup>®</sup> can be prepared for various “frequency ranges,” enabling the devices to be utilized for the various frequency bands of the human spectrum.

Due to its construction, the Pulsor<sup>®</sup> is a resonant device; but since it utilizes scalar field resonance—presently unknown to orthodox electromagnetics (EM) science—its exact mode of functioning has not been understood. Since the conventional scientist does not yet possess scalar wave theory or technology, a conventional explanation of the Pulsor<sup>®</sup> cannot be successfully given. However, the new scalar field electromagnetics (electro-gravitation), which starts by correcting errors in the foundations of present electromagnetics, has progressed far enough so that a satisfactory conceptual explanation for the operation of scalar devices like the Pulsor<sup>®</sup> can be formatted.

### OVERVIEW

#### **Scope of this paper**

This present paper presents a detailed overview of the scalar concept of operation of the Pulsor<sup>®</sup>. Work on the scalar EM theory is still in process, and an even more comprehensive treatment is expected to be possible in the future. Present indications are exciting, however, since general relativity concepts rigorously confirm that scalar EM waves are gravitational waves. Thus we are on the threshold of a vast new advance in science and in our scientific understanding of phenomena.

### ERRORS IN THE FOUNDATIONS OF PRESENT ELECTROMAGNETICS THEORY

After some years of diligent examination of the foundations of present electromagnetics theory, the author has uncovered numerous serious flaws, which render the present theory a special case. (1) When these flaws are corrected, a more comprehensive vastly expanded electromagnetics results. In addition, some of the presently restrictive “laws of physics” are revealed to be special cases, which can be surmounted by scalar field technology. (2) A series of papers (3) (4) (5) (6) on the corrections to the EM has occurred in proprietary private laboratories

in North America. In this paper we present only a summary of this work, an overview of scalar field technology necessary to allow the operation of the Pulsor<sup>®</sup> to be explained.

**Major Corrections to EM Theory.** Some of the major corrections to present EM theory are summarized:

**Charge and charged mass:** At present these are falsely made identical in classical EM theory. However, the “charge,” according to particle physics, is actually a virtual particle flux on and off the bare mass. Mass and charge are two entirely separate things. Rigorously, the charge represents a multitude of  $d\varphi/dt$  or “phi-dot” currents—a  $\varphi$ -flux. (7) Also, charge is not necessarily quantized, nor is it even necessarily “locked to” a mass. In the new scalar EM, “mass” is simply a trapped scalar resonance—a localized standing scalar wave, trapped by local spin or vortex action. Indeed, the mass and inertia of an object can be altered (increased or decreased) by scalar radiation, and such effects have been demonstrated in proprietary laboratories. These effects, however, do not yet appear in the standard, orthodox EM theory.

**Electrostatic scalar potential ( $\varphi$ ):** This quantity presently is modeled as a three-dimensional, spatial stress. Instead, it is an n-dimensional stress, where n is equal to or greater than 4. It is a spatiotemporal stress, for it stresses the rate of flow of time as well as stressing space. Further, the electrostatic scalar potential of vacuum, dubbed  $\varphi_0$ , is assumed to be zero in classical EM theory. Actually,  $\varphi_0$  is a very high value, probably approaching some 200,000,000 volts from a hypothetical “zero flux” stress: point, could such be found. Further, vacuum is identical to space-time, and both are identical to  $\varphi_0$ . In modern general relativity, vacuum space-time is simply a collection of stresses and potentials such as electrostatic scalar potential; it is not an emptiness filled with such stresses. Neither length nor time—hence nor space—exists until an interaction occurs in vacuum space-time scalar potential. (8) Note that  $\dot{\varphi}$  (phi-dot, the time rate of change of the potential flux) represents a flow of space-time, and a flux of  $\varphi$  on and off a point or spatial particle of mass. The charge (electrostatic scalar potential) of a particle represents its rate of accumulation and expulsion of vacuum space-time flux; in the modern theory, this flux is modeled or regarded as a flux of virtual particles. Note that part of this flux that is being absorbed and emitted by the particle is a stream of little pieces of time. Thus the “charge” of the particle represents or controls its rate of flow through time. Indeed, if we change the “background  $\varphi_0$  charge” intensity (i.e., if we curve space-time locally) through which the particle is moving, we change the particle’s rate of passage through time. The charge of a particle also represents the accumulation of classical energy ( $F \cdot ds$ ) and transformation of that energy into an energy (spatiotemporal stress). (9)

**Vector magnetic potential ( $\vec{A}$ ):** The  $\vec{A}$ -field is assumed to be always an aspect of, and connected to, the magnetic field. Instead it can be entirely disconnected from the magnetic field, and is thus a fundamental new field of nature with new properties. (10) Specifically, in vacuum the free  $\vec{A}$ -field is the swirl in the electrostatic solar potential (virtual particle flux) and is observably scalar, not vectorial, in nature.

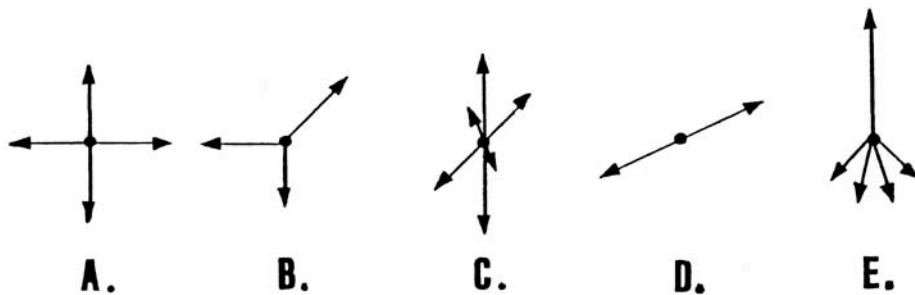
**Constancy of the speed of light:** The speed of light in vacuum is variable. Vacuum is  $\varphi_0$ , and the value of  $\varphi_0$  of a region can be increased by accumulation of charged particles. (11) Thus the  $\varphi_0$  of a hard vacuum near the surface of the earth, another planet, or the sun is higher (more intense,

more dense virtually) than is the  $\phi_0$  of a hard vacuum in deep space. This effect is due to the increased  $\phi_0$  flux from the accumulated charged mass particles of the planet or sun. An EM wave in vacuum is longitudinal, not transverse. (12) In other words, it is a kind of “electromagnetic sound wave” in the virtual particle flux of vacuum. It follows that a vacuum EM wave moves faster through the virtually more dense vacuum near a planetary or solar mass (whose accumulated charges increase the local vacuum flux intensity) than it does in the hard vacuum of remote space. (Just as a sound wave moves more rapidly in water than in air.) The effect has been experimentally known for decades. (13)

**A vacuum EM wave:** In classical EM theory a vacuum EM wave is assumed to vibrate transversely. Instead, it is vibrating longitudinally, like a sound wave. The transverse or Hertz wave exists only in a material medium, not in vacuum. This follows in a straightforward manner from the definitions of force and force field, particularly  $\vec{E}$  and B fields. No one has ever broadcast a Hertz transverse wave through vacuum. This phenomenon has been previously dealt with by the author at some length. (14)

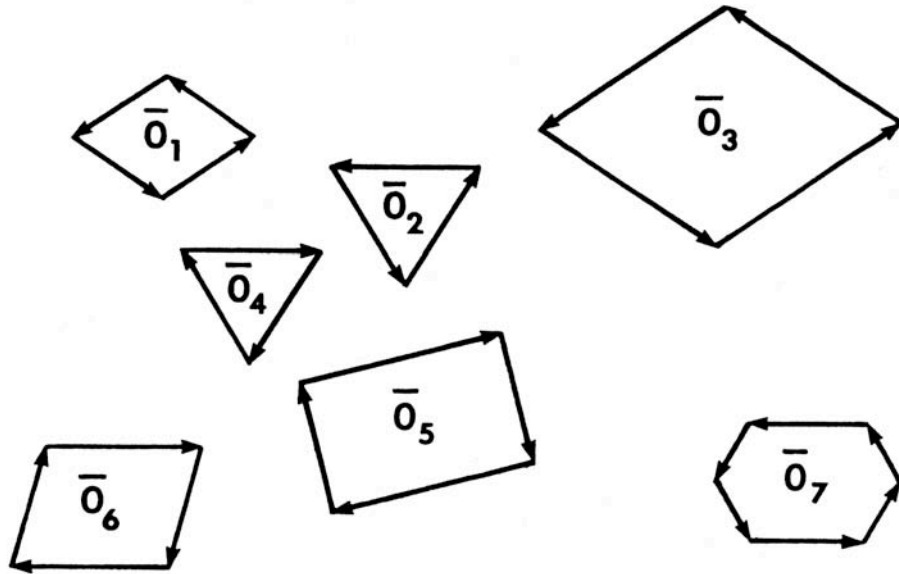
**Vector and Scalar:** Both a vector and a scalar, in the physical universe, have internal vector substructures not presently provided for in ordinary vector mathematics. Indeed, the fundamental axiom of vector mathematics that establishes the zero vector, eliminates the substructure of a vector zero from consideration. (figure 1, figure 2). Again, this has been previously dealt with by the author at some length. (15) By deliberately constructing the substructure, we can make EM waves, which have no external electric field or magnetic field, which are not detectable by ordinary means, and which can do completely anomalous things. Many of the effects possible have already been pointed out by the author. (16)

**Figure 1 – Superposition does not eliminate the virtual substructure**



**TWO OR MORE MACROSCOPICALLY “EQUAL” VECTORS OR SCALARS CAN DIFFER DRASTICALLY IN THEIR VIRTUAL SUBSTRUCTURE DISTRIBUTIONS. EVEN TWO “ZEROS” MAY BE DYNAMICALLY DIFFERENT DUE TO THEIR DIFFERING SUBSTRUCTURES.**

Figure 2 – Are these systems equal?



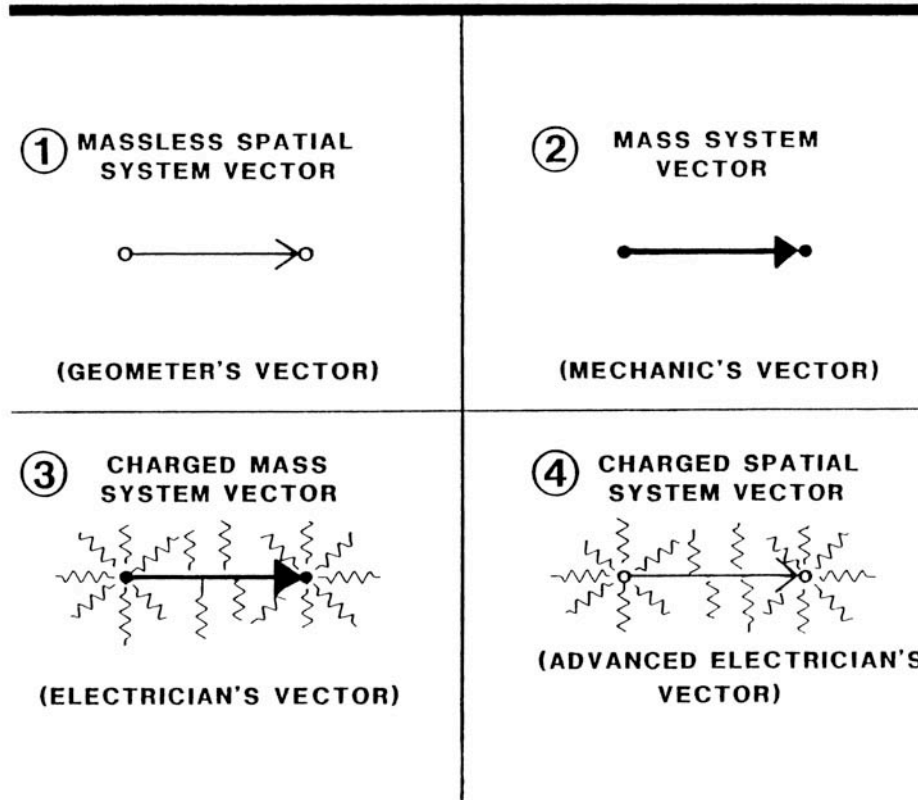
Actually, there are four different kinds of vectors (figure 3) used in physics, but these four are presently confused as one and the same. Briefly these are (1) the geometer's vector, a smeared spatial point; (2) the mechanic's vector, a smeared particle of inert mass; (3) the electrician's vector, a smeared charged particle of mass; and (4) the advanced electrician's vector, a smeared charged spatial point. Again, the reader is referred to the author's more comprehensive discussion of physical vectors. (17)

**Conservation of energy:** Rigorously, conservation of energy only holds in a special relativistic (Lorentz) frame. In a curved (accelerated) frame, conservation need not apply. That is, one need not conserve energy, charge, mass, or momentum. (18) When scalar electromagnetics is used, the local frame is always general relativistic and curved. It is not an uncurved, Lorentz frame as assumed by Einstein. (And ordinary general relativity) as a self-imposed restriction. A new conservation of energy law, having three terms, is necessary. A simple derivation of this law has already been shown by the author. (19)

Note that the present electrostatic scalar potential's magnitude represents the amount of work that would have to be performed to push a unit charged mass in from infinity against the field. (20) That is, the ESP represents accumulated energy, infolded into the stress of vacuum space-time itself. (21) This "infolded energy" of spatiotemporal stress I call "anenergy." Therefore, to be precise, the "energy" which must be conserved for in a local region of space-time consists of (1) the amount of energy "frozen" into mass in the space-time. Plus (2) the amount of energy due to motion of the mass and/or waves moving through the locality. Plus (3) the amount of energy infolded into the local anenergy—into the internal stress of the local space-time in which the

particle and its motion exist. Thus the true (new) conservation of energy law has three terms: one for mass, one for energy, and one for anenergy. (22) The old conservation of energy law simply assumed that the intensity of the local vacuum stress remained constant throughout the local space-time region of interest. In other words, it was a special case of our more general law.

**Figure 3 – The four vectors of physics**

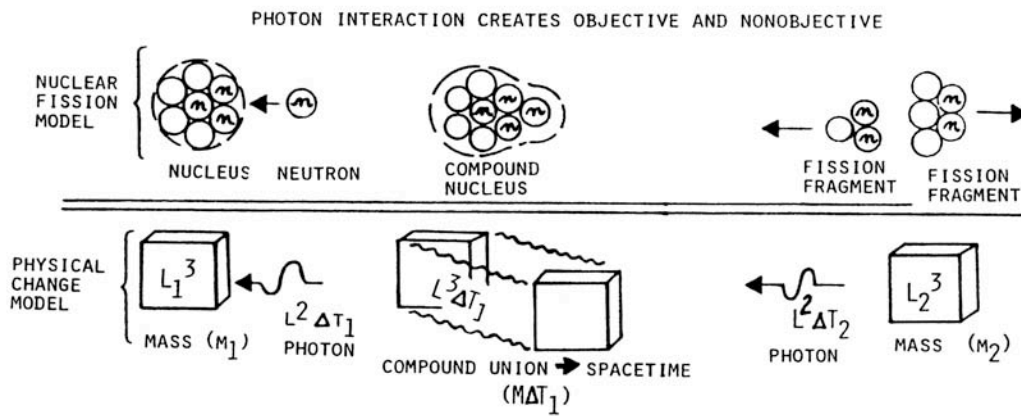


**Newton’s third law:** This law is essentially a vectorial law, and is true so long as conditions remain vectorial for a finite amount of time during which the forces interact. If one captures the action force, however, by applying its opposite and summing to zero as an artificial potential, then operates upon this potential to change direction, then releases the reaction force in the summation, Newton’s third law as written can be violated at will. If we do not collect action/reaction into a potential in the middle and operate upon the potential, Newton’s third law applies as written. As can be seen, the present third law is just a special case of a more fundamental law. Thus the old standby, “for every action there is an equal and opposite reaction,” also changes in the new EM. Now the reaction need not be local, need not be antiparallel, need not even occur at exactly the same time, and need not be singular. Further, the reaction can even occur at a different place in some cases. Indeed, were this is not the case, no “force field” (which is just a clever way of restating and hiding the idea of action at a distance) could ever be formed.

**Thing and motion:** Actually, in thought we must “stop” motion briefly to seize upon the idea of a “thing.” At the fundamental quantum level, it is not possible to separate the “thing” in motion

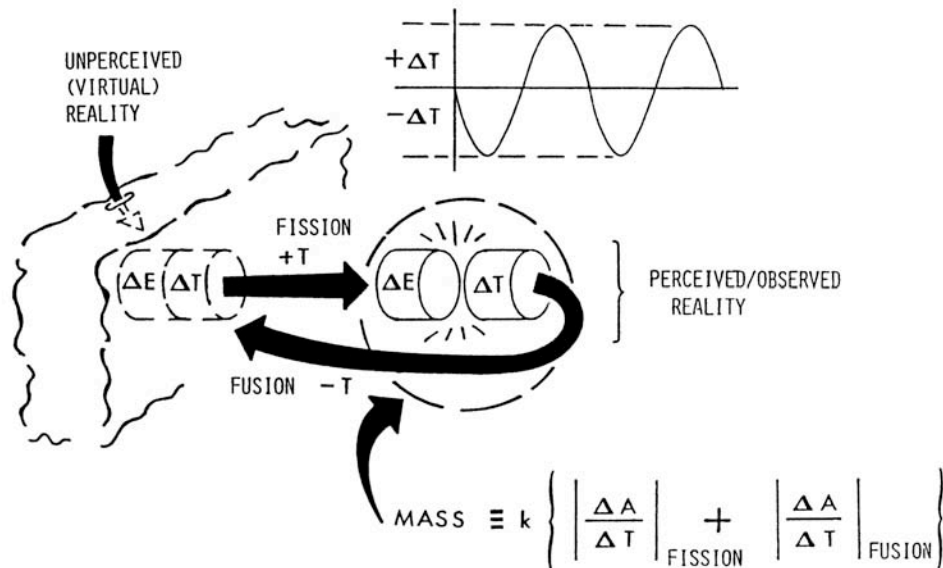
from its motion, but a “smeared thing,” smeared in time and length or space. This is really all that complementarily principle means: before we interact to stop it (and have a “thing” or particle) or not stop it (and have a wave or unstopped entity), both aspects coexist without separation. Indeed, in physics two entities, one associated with “stopped” and one associated with “not stopped,” are thought to be “welded together” into something called “action, which has the units of angular momentum. Basic reality is thought to be comprised of action. The changes that make up perceived or detected reality are thought to occur in little jumps or chunks of action; such a chunk of action is called a quantum. (Figure 4) The basic quantum itself is called photon.

**Figure 4 – Raindrop model of change**



When we observe or detect, the basic unit of change is the quantum. However, the quantum itself cannot be detected; only one “piece” of it can be detected at a time. (Figure 5) In this detection,

**Figure 5 – Mass, quantum change, and time oscillation**



the duality principle simply says that we can get either the stopped things (particle) or the non-stopped entity (wave), depending upon how we interact. The uncertainty principle merely points out that there is a certain magnitude to the “two things (called canonical variables) welded together with no seam in the middle, “and we cannot get both aspects from a single interaction. If we get all of one precisely, we get none of the other, representing a total uncertainty, in it. We can get part of one and part of the other, in which case we lose part of each, representing an uncertainty in measurement of both canonical variables. Actually, this is rigorously true in the linear case; in the highly nonlinear case, one can deviate from this rigid law.

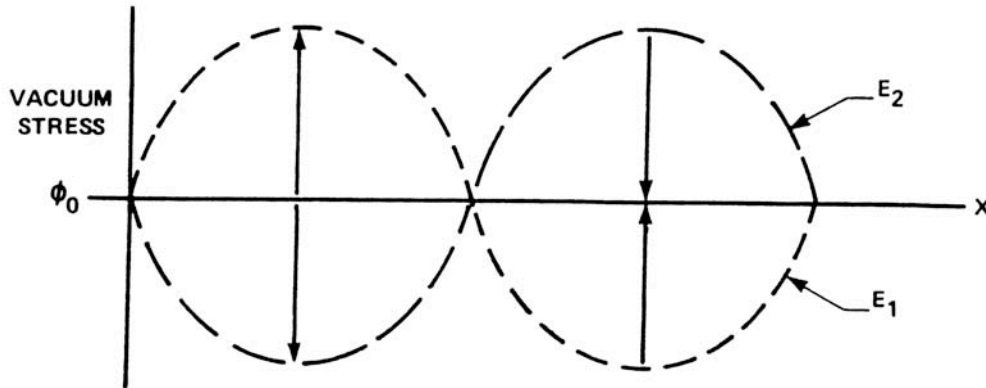
**Quantum superposition and scalar EM theory:** In the standard linear quantum theory, quanta do not superpose. Thus photons–quanta–are said to interact one at a time and be absorbed or emitted one at a time. (By “interact,” we mean something like being absorbed or emitted.) However, in the new EM a simple photon may be considered to be one oscillation (one wavelength) of an EM wave. The photon consists of action–energy x time (that is, it is a little piece of energy, welded to a little piece of time, with no seam in the middle.) The photon is the carrier of time, and it dispenses its time to a mass which absorbs it, turning the mass into “mass time.” When reemitted from mass time, the photon tears off the little piece of time and carries it away, leaving behind a spatial mass (a “stopped” object). (Figure 4) Since all objects are continually absorbing and emitting photons, this process prescribes the means by which a spatial mass moves forward in little jumps through time. However, note that a little time “stitch,” so to speak, is added to the mass by a single photon absorption, then taken away by photon emission. Time is thus not precisely a “dimension,” as Minkowski modeled it; rather, it is a series of individual time “stitches,” occurring one-at-a-time, each pulled out or discarded before the next occurs. (23) Since all physical objects are doing this, it follows that each physical object itself is “quantized” by its photon interaction. That is, its “existence in time” is continually “chopped up” by the quantum interaction of photon absorption and emission. Thus, any “measurement” or detection of a laboratory instrument will be quantized; rigorously any instrument’s detection is the detection of its own internal change, and the instrument itself is already a quantized matrix. Also, photon emission–in carrying away time from a mass–causes “collapse of the wave function” in quantum mechanics, since no wave can exist unless there exists some “time” in which it can wave. For the same reason–photon emission continually carrying away “time” throughout the physical measuring apparatus–all measurement is spatial. Strangely, orthodox physicists do not yet seem to have noticed that conceptually, mass does not exist in time–rather, mass time does

To return: As is well known, the photon is its own antiparticle. In the new EM we take a photon to be one single wavelength (one full oscillation) of an electromagnetic wave. We take an antiphoton (relative to some particular photon) as another similar photon, but 180 degrees out of phase with the reference photon. Also, note that the photon can coexist with its own antiparticle, something matter and antimatter cannot do.

Thus we may visualize a photon and its antiphoton (each as simply one oscillation) fitted together so that they are 180 degrees out of phase with each other. (Figure 6) In that case, from the classical wave viewpoint the externally perceivable  $\vec{E}$  fields sum to zero, as do the externally perceivable B fields. Externally, both photons seem to have “disappeared.” Yet the complementarity principle requires that both photons are still there! Each contains its own energy, but externally there is no transverse “energy” in the wave, since there is no “transverse  $\vec{E}$  or transverse B” amplitude. If run through a slight modulating process, the two photons are



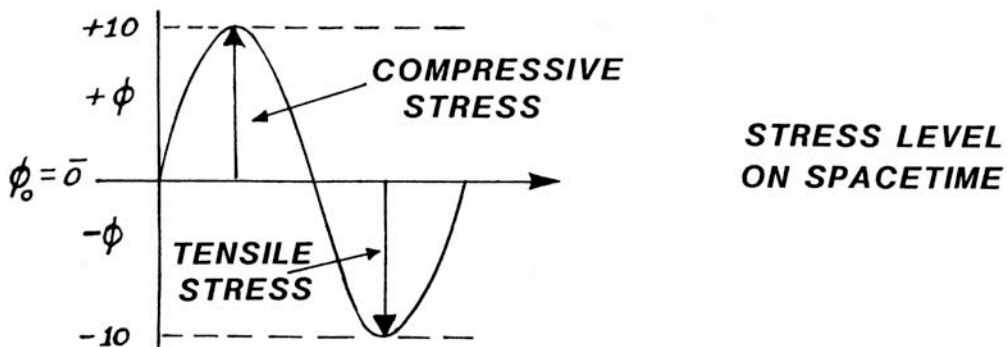
**Figure 6 – Two 180° phased sine wave  $\vec{E}$ -fields**



intertwined into a single “giant photon,” having zero  $\vec{A}$  and  $\vec{B}$  field energy to the external observer, but containing infolded STRESS or anenergy due to the multiple locked-in forces. This is the mechanism by means of which electromagnetic energy is translated into stress on space-time (i.e., into vacuum, which is simply a conglomerate flux potentials).

In short, we have thus translated the individual energies of the two photons into oscillations of the spatiotemporal stress (electrostatic and magnetostatic scalar potentials) of vacuum. (Figure 7) Rigorously, this is a gravitational wave, since the energy density of vacuum space-time is being oscillated. To the external observer, this is also a “zero-vector” wave, insofar as normal  $\vec{E}$  and  $\vec{B}$  fields are concerned. This is a scalar wave or Tesla wave. Such a wave is said to consist of “giant photons.” Longitudinal in nature, and composed of infolded multiples of otherwise normal photons and antiphotons.

**Figure 7 – Oscillation of the spatiotemporal stress of vacuum**

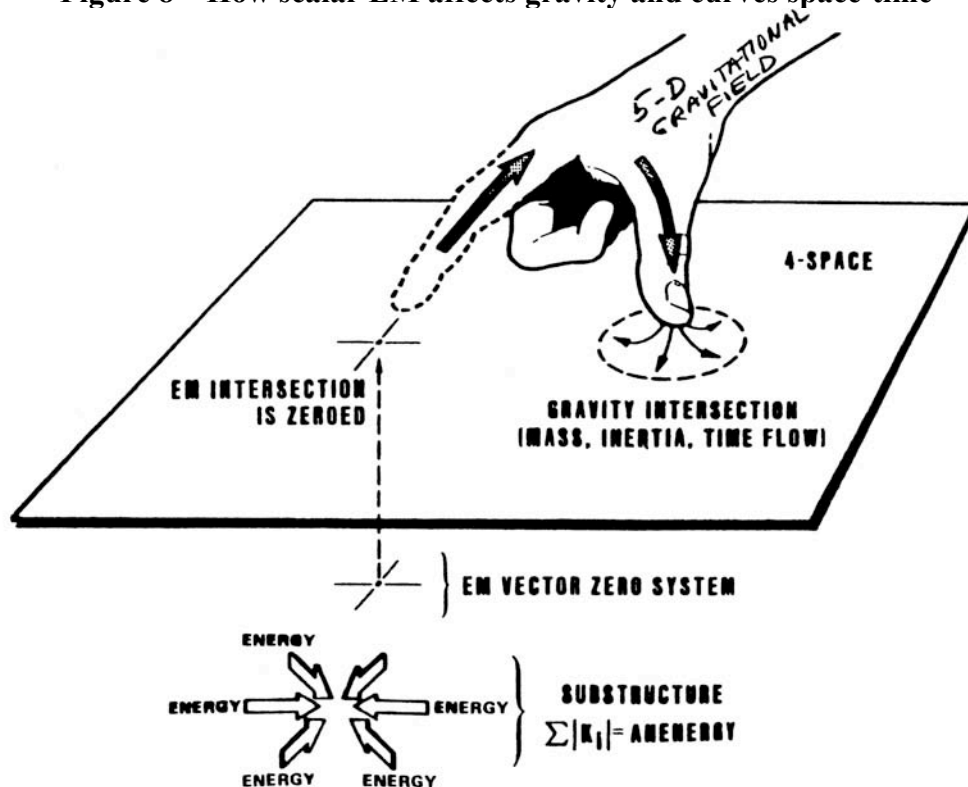


In 1921 Kaluza succeeded in unifying electromagnetics and gravitation in a single theory. To do so, he had to add another spatial dimension to Minkowski’s four. (Normal space-time is thought to be 4-dimensional; 3 space dimensions and one time dimension. Kaluza used 4 space dimensions and 1 time dimension.) In the new theory, there is really not a separate electromagnetic field and 4-d gravitational field, as classical physics assumes. Instead, there is just a single field. The 5-dimensional gravitational field intersects our world in two fashions: the 4-d aspect we detect or see as our normal 4-d gravitational field, and the 5-d aspect we detect or see as our normal electromagnetic field.

However, it is very much easier for the 5-d gravity field to “bleed off” as the 5<sup>th</sup> dimensional electromagnetic field. It is very difficult for it to bleed off as our 4-d gravity field. Between two electrons, for example, the bleed-off into EM field is about  $10^{38}$  or so as strong as the bleed-off into the 4-d gravity field. Thus our normal electromagnetic circuits produce such miniscule gravitational effects that they are not detectable.

**This is important:** *Normal electromagnetics represents the releasing or bleeding-off of the 5-d gravitational potential as electromagnetic field. Only in throttling off this EM bleed-off can we force the bleed-off to occur in 4-d gravity field (Figure 8). (Figure 9).*

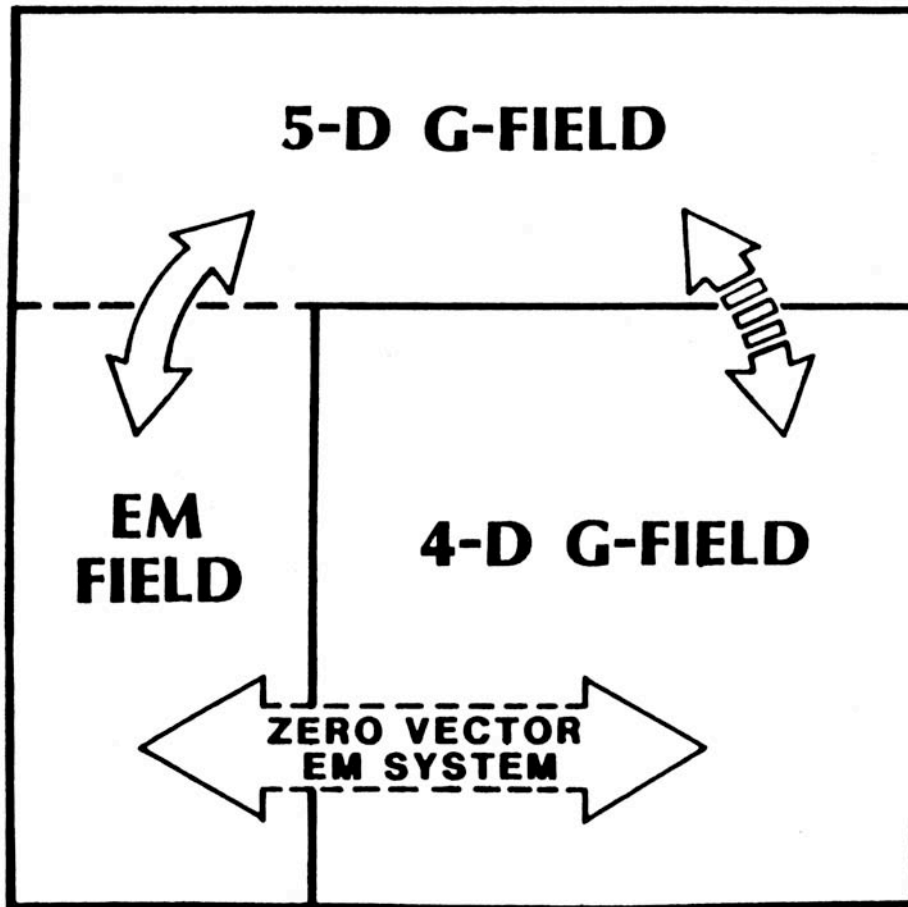
**Figure 8 – How scalar EM affects gravity and curves space-time**



And this is precisely what we do when we sum multiple electromagnetic force fields or waves to zero vectors! That is, in summing an EM wave and its anti-wave to zero  $\vec{E}$  and  $B$  fields, we have zeroed out the EM bleed-off of the 5-d gravitational potential. But in the oscillations of each component EM wave in the zero-vector scalar wave, energy is surging in and out of the “lockup” summation. Thus the energy density of vacuum is being oscillated about its ambient value—and this is a 4-d gravitational wave, rigorously, according to general relativity! Scalar electromagnetics is thus electrogravitation, and scalar EM waves are electrogravitational waves.

This also represents a drastic and fundamental change to quantum mechanics. From the standpoint of comparison to energy or mass, we have a “zero quantum” which yet contains infolded quanta. Since these quanta are infolded inside zero, their  $\vec{E}$  and  $B$  fields are now infolded into the virtual vacuum plasma. We have deterministically polarized the vacuum, in the pattern and frequency we desire, and this does not appear in normal classical physics. This “zero

Figure 9 – Converting EM field energy to G-field energy and vice-versa



quantum” is a pure quantum of space-time–of anenergy, of the vacuum itself, of spatiotemporal stress, of the virtual state (flux), of the VACUUM SPACE-TIME MEDIUM ITSELF. (24) Further, it contains whatever deterministic pattern we wish to construct, and so *we may now directly engineer the virtual state itself, predetermining what shall or shall not emerge into physical reality in the first place!*

*In other word, we can now directly engineer physical reality itself, including revise the “laws of nature.”*

The scalar wave and the giant photon are real, and have totally new properties not covered in the present literature. Note also that the in infolded photon/antiphoton substructure of the giant-photon longitudinal scalar wave can consist of as many sum-zeroed pairs as we wish. We can precisely tailor the substructure to produce energy or action at a distance, or to produce force at a distance–ANY KIND OF FORCE WHATESOEVER; STRON, WEEK, GRAVITATIONAL, OR ELECTRICAL.

Note that in the new EM, then, quanta do superpose and INFOLD under this peculiar condition: But in so doing, energy is turned into anenergy (spatiotemporal stress, or electrostatic scalar potential). Note that also, the observable is turned into the virtual. Every virtual particle or virtual photon is actually either itself a giant photon or part of a giant photon system. *Indeed, the entire virtual state may be regarded as a single giant photon, as can the vacuum, and as can space-time.*

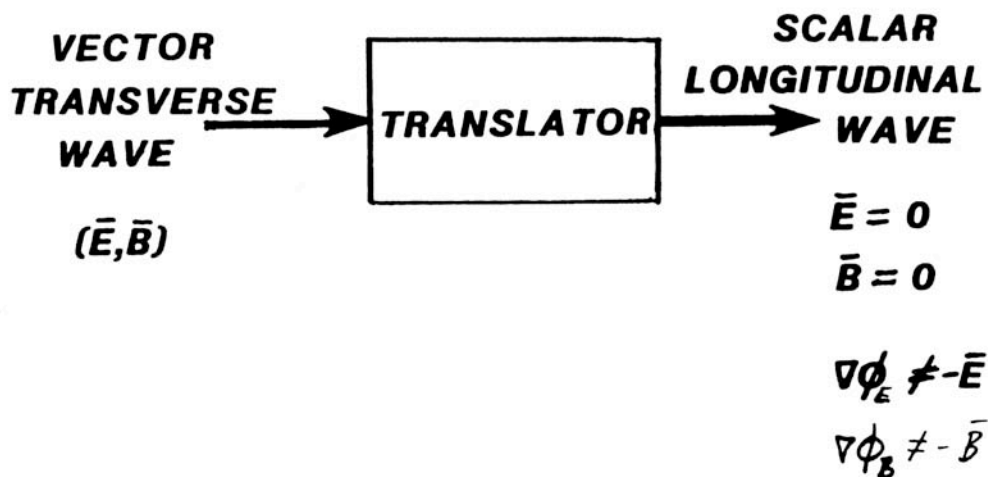
Note also that the scalar wave (and its substructure) is immune to ordinary  $\vec{E}$  and  $\vec{B}$  linear detection effects. This wave readily penetrates Faraday cages, since it essentially does not interact with the conduction electrons to cause precession. It can also penetrate into the innermost part of the nucleus of an atom, since it essentially does not interact with the electron shells to cause electron precession waves. The scalar wave is thus ideally suited to directly affect the nucleus, leading to the ability to affect the strong force, transmute elements, cause fusion or fission without external “energy” effects, increase or decrease inertia of the atom, and generate unilateral force upon the nucleus without generating Newton’s reaction force. Since the reaction occurs in anenergy (scalar), not energetic (vector) conditions. By utilization of proper substructuring and phasing, antigravity can be produced, and it has been produced in the laboratory. (25) Direct interaction with the nuclear reactions of the nucleus can also be engineered, so that many new things—such as direct transmutation of elements—can be engineered. Such scalar transmutation has already been accomplished in a proprietary laboratory by a close associate.

Note also that when such a structured scalar wave (giant photon) impinges upon a highly nonlinear region, mass, or EM functioning, then phase shifting of the paired oppositive photon substructure components occurs. This means that the paired photons no longer sum to zero, and real EM energy in the normal sense is again produced INSIDE the nonlinear region, mass, or EM functioning with which the scalar wave is interacting. This can even be partial; that is, one part of the giant photon’s substructure can interact in a frequency dependent, resonant manner with a receiving nonlinear resonator, causing the giant photon to give up only part of its substructure, or to “decay.” As can be seen, giant photons have highly complex interaction capabilities not possessed at all by normal photons. Further discussion along this line is beyond the scope of this paper.

Thus a highly nonlinear system can shift anenergy (spatiotemporal stress) from a giant photon into ordinary photon energy (ordinary linear EM radiation), including lattice energy of materials, or radiation in space.

The opposite is also true, particularly if the highly nonlinear system is also far from thermodynamic equilibrium and forms a “Prigogine” system. (26) (27) Such a nonlinear system, which can translate EM energy (vector energy) into anenergy (spatiotemporal stress, scalar

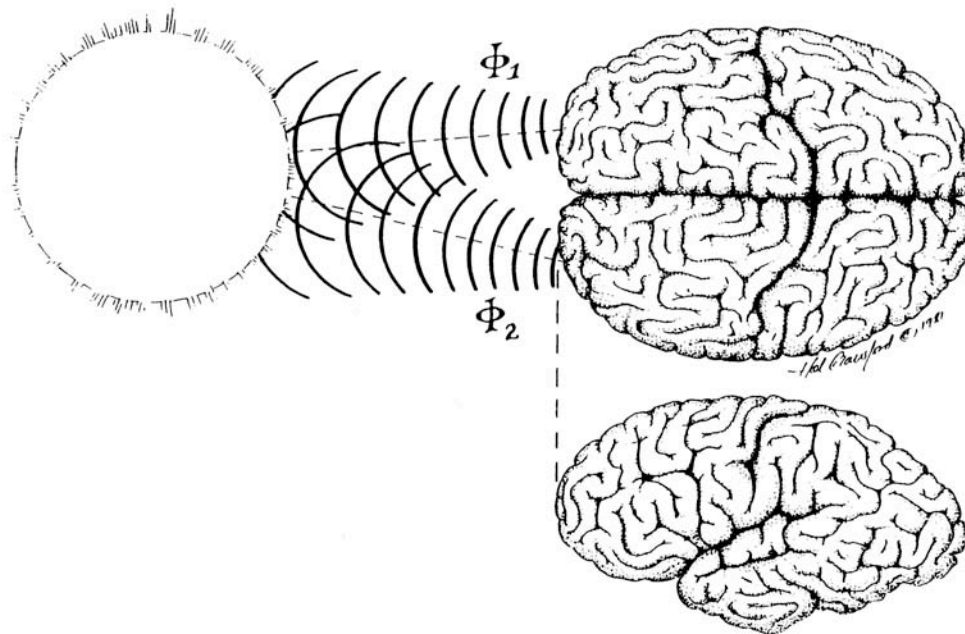
Figure 10 - The Translator



waves) and vice versa, I refer to as a TRANSLATOR. (Figure 10) Examples of translators are ionized gases, plasmas, scalar interferometers, Geiger tubes, certain amorphous semiconductors (particularly when stressed just to the onset of physical rupture), Reich's orgone boxes, dielectric-filled capacitors, stressed quartz-bearing rocks, etc. And George Yao's Pulsors!  
®

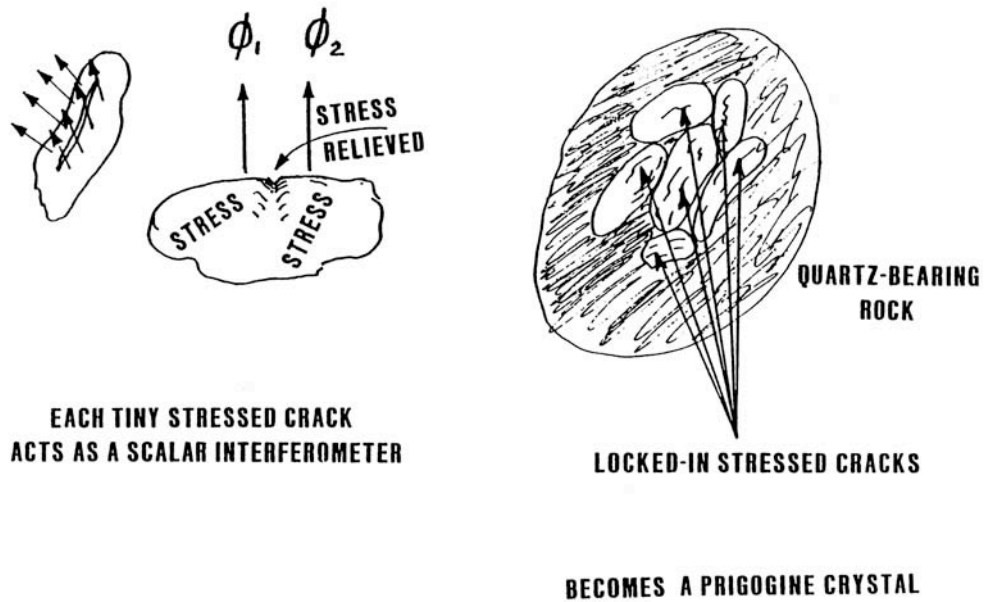
**Supraliminal velocity:** In the new EM, the scalar wave acts in the manner of a solution. It also has an extra degree of freedom—time—as compared to ordinary waves. Its velocity can vary from zero to near infinity, and is—among other things—a function of the “amplitude” of the oscillation utilized. Thus both subliminal and supraliminal velocities are possible with scalar waves. In addition, time effects—such as precognition and postcognition—are possible. Further, contrary to much of the fallacy in physicists's minds, detection of supraliminal waves can easily be accomplished by a two-stage detection (it cannot be accomplished by a single stage detection). An example already utilized in physics is the simple two-slit box: deBroglie waves (which always travel faster than the speed of light) are interfered, so that the “group velocity” of the superposed waves in the interference pattern is subliminal. An electron then will interact with this subliminal group-wave, to give an ordinary detection. The two-slit box is already a two-stage supraliminal detector and a scalar interferometer. The two cerebral hemispheres of the human body also can function as a scalar interferometer detector of supraliminal quantities. (Figure 11)

**Figure 11 – The human cerebral cortex as a natural scalar interferometer**



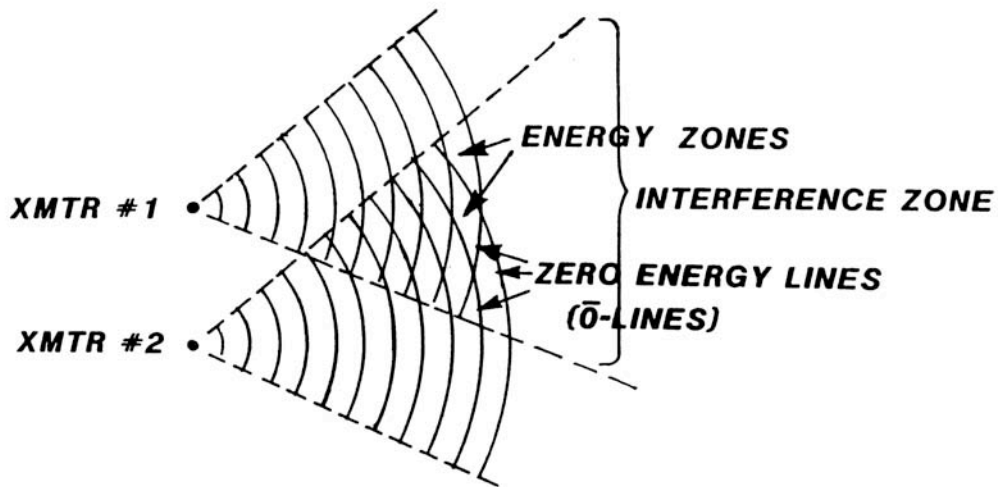
This enables remote viewing, clairvoyance, clairaudience, telepathy, precognition, postcognition, psychokinesis, remote viewing, etc.—indeed all the phenomena of classical parapsychology are explainable directly by scalar EM theory. Many other natural scalar interferometers exist, including stressed rocks. (Figure 12)

Figure 12 – Other natural scalar interferometers



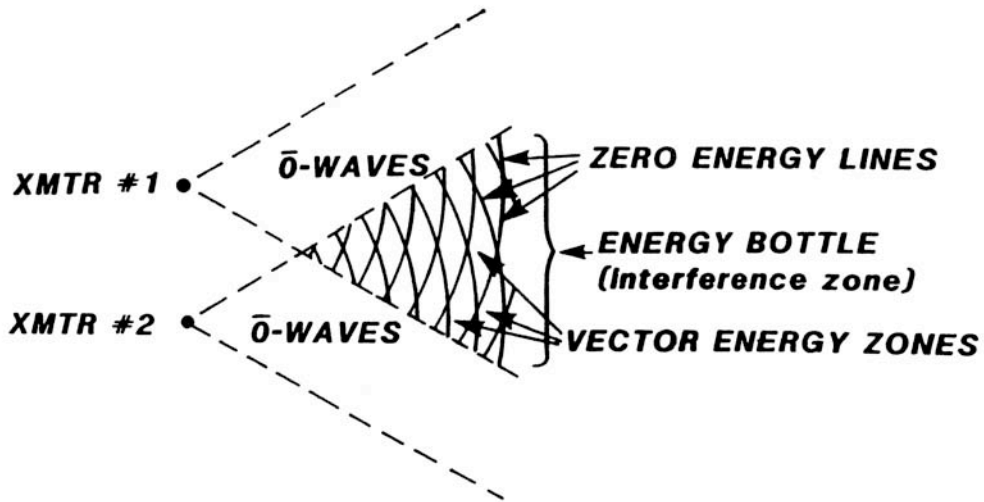
**Interference:** In ordinary EM theory, two crossing beams of EM energy produce interference, where the out-of-phase condition produces destructive interference. For two similar waves (same frequency and amplitude), we consider that the “zero amplitude lines” are the result. (Figure 13)

Figure 13 – Transverse wave interference



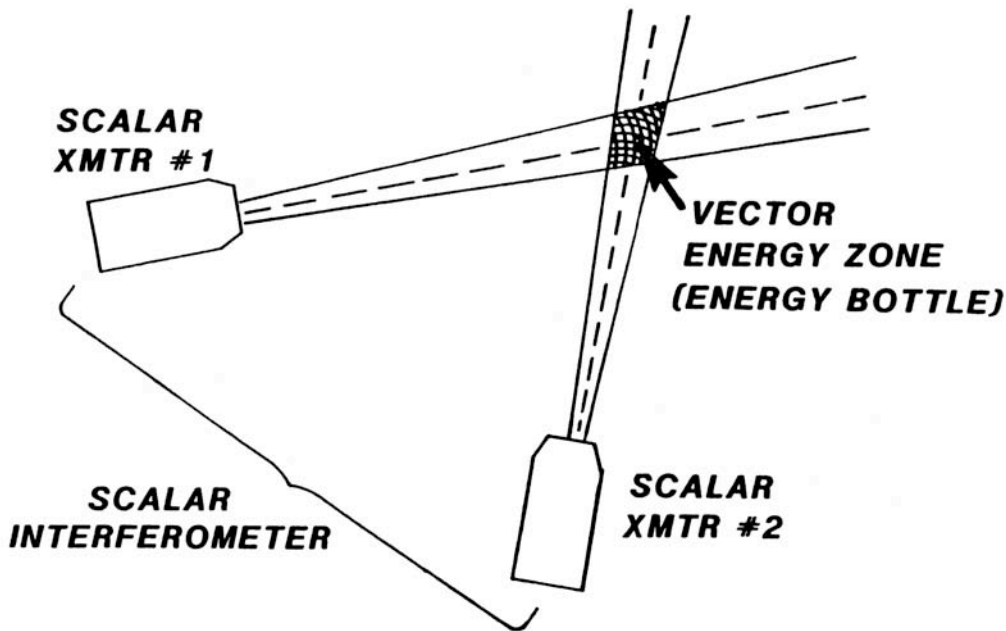
In the new EM, two *scalar* waves interfere in just the opposite manner: we put in the “zero lines,” and the out-of-phase destructive interference translates anenergy into energy, producing “ordinary” waves (which result in transverse oscillations of detecting electron gases). (Figure 14) If the scalar waves were perfect, however, the energy in the interference zone would be

Figure 14 – Longitudinal wave interference (scalar waves)



LOCKED IN PLACE AS IF IN AN ENERGY BOTTLE, (Figure 15) and it could not radiate away as photons. We can produce sufficiently good scalar waves to produce at least a “leaky bottle,” and so we have the phenomenon of the direct production of nonradiating energy at a distance. Note that all the energy put into each interference wave at the transmitters emerges in the interference zone.

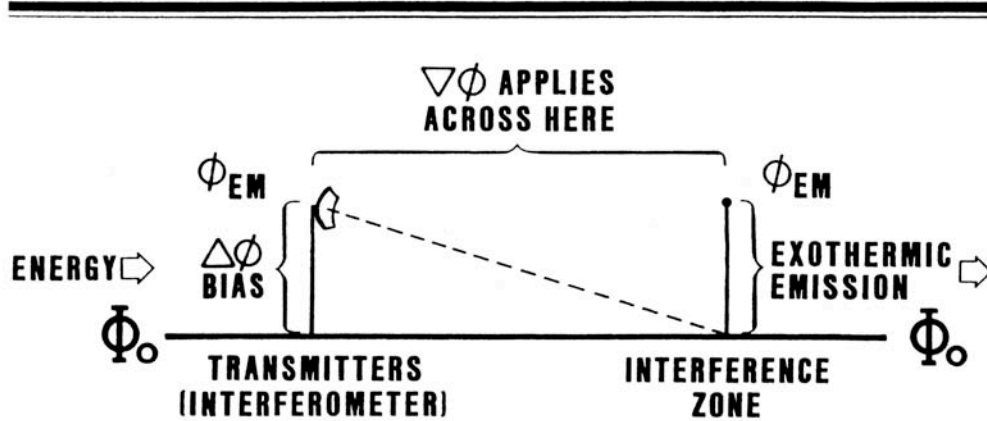
Figure 15 - Creating energy at a distance



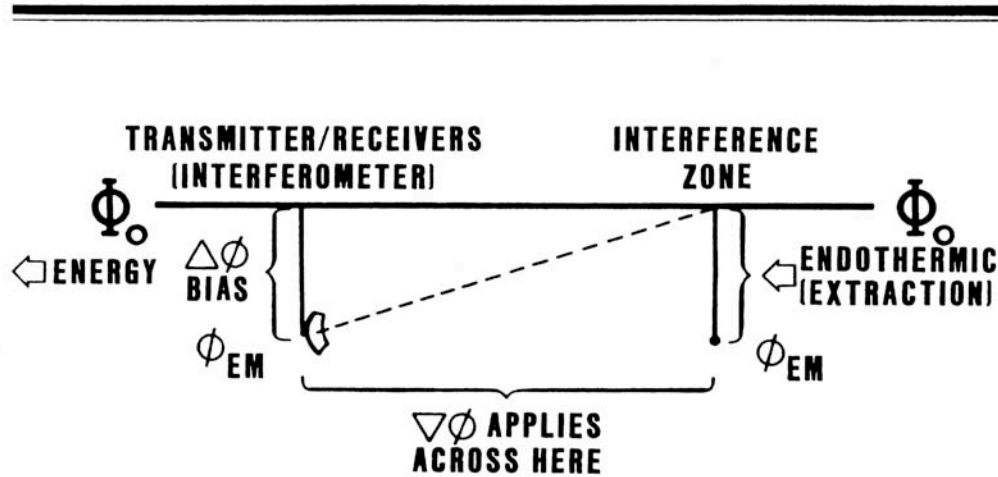
This is the “exothermic” mode of a scalar interferometer (Figure 16), which produces energy at a distance. To *extract* energy from a distance, all that is necessary is to invert the potentials on the transmitters (Figure 17). This produces an “endothermic” mode, as seen in the distant

interference zone. Interference can be produced “inside” normal matter, deep within if need be, as determined by the focusing of the interference zone. In this manner highly localized energy-in-a-bottle effects can occur, even within nuclei of atoms.

**Figure 16 – Exothermic mode (scalar interferometer)**



**Figure 17 – Endothermic mode (scalar interferometer)**



Dramatic examples of scalar interferometry occur in humans, where the two cerebral hemispheres have the ability to produce scalar waves and scalar beams, including interference patterns, and energy bottles. (Figure 11) This is the means by which human psychokinesis (Figure 18) is accomplished and it is also the means by which true fire walking occurs. In the latter, the energy bottles are produced on the skin of the feet and legs. Energy from the fire enters the bottle and is trapped there, so that the soles of the feet do not burn. (29)



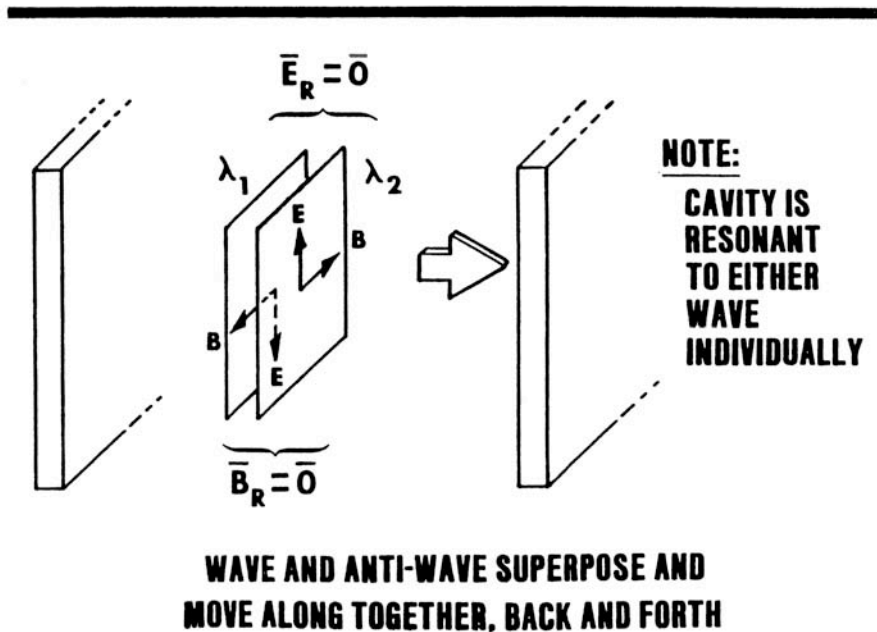
Figure 18 Psychokinesis: bending metal



**Note that**, if we look at the stupendous numbers of firings of nerve dendrite endings, in the two human cerebral hemispheres, we are looking at astounding numbers of firings of ions, etc. Each fired ion is a little electric field vector, and its spin is a little magnetic field vector. The varied orientations and myriad numbers of these little vectors sum almost completely to zero, with only a very small not summed residue remaining. The residue, we measure with our electron detectors as “brain waves.” Nothing could be further from the truth: These are the residue waves or the remnants of the brain’s real activity. Its primary activity is the specific patterning of the myriad of vector components in the summed “vector zero”  $\vec{E}$  and B field parts. In other words, the real cerebral activity is going on inside two giant vector zeros. Presently we do not even attempt to measure this patterning. If nature had designed the human nervous system according to classical electromagnetics, we would have been filled with straight wire conductors, not myriad of “spark gap” avalanche discharges. Our nervous system is built along scalar principles; the two cerebral hemispheres form a highly specialized scalar interferometer. Unfortunately the scalar output of our nervous system is buried deep in our unconscious, so we are largely unaware of our own gigantic potential. Given development of proper scalar detectors so that we can “see when we are getting it right,” humans will be able to consciously control and master the functioning of their scalar nervous system. A human who has done so will be able to walk through walls, teleport, levitate, disappear, heal the sick, see and hear at a distance, etc. In short, all the things that previously have been accomplished by only a few adepts after long and arduous training will be available to the average citizen with only a relatively short training period. *This* is the natural state of humanity, not the limited condition in which we now find ourselves.

**Resonance:** In addition to all the modes of resonance presently contained in the theory, the new EM allows several new kinds of resonance. Note that not all possible scalar resonances have yet been discovered! Basic scalar resonance is shown in Figure 19. In brief, we shall be interested in the following kinds of scalar resonance:

**Figure 19 Basic scalar resonance**



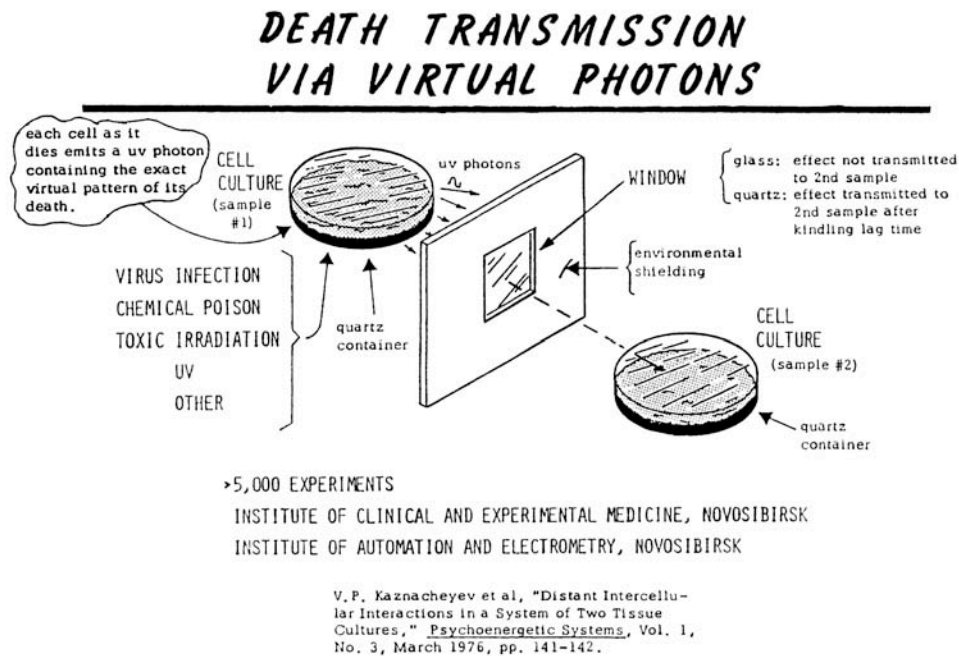
**Resonance of a single part of the substructure:** Here we refer to one single pair (photon and antiphoton) of an overall scalar wave: I.e., one scalar part of the substructure. When a scalar wave (giant photon) encounters a specific translator for only one particular infolded scalar photon pair, then only that pair will be phase-shifted to produce “ordinary energy” at the same frequency. (30) If, in addition, the translator contains a portion or subsystem that is resonant to that particular frequency, then the resonator will be entrained into forced resonance, acting as a “capacitor” or accumulator of the translated energy. (31)

This effect can be highly specific and highly dramatic, particularly upon biological systems which are now known to possess sharply tuned “trigger” resonant system that react to extremely small energy levels. By deliberately infolding scalar-pair triggers into its construction, a scalar wave can be specifically designed to contain a scalar pair which directly “hits the specific trigger resonance” desired. Thus even a weak carrier, modulated with a specifically composed scalar substructure, can cause completely anomalous “trigger resonance” in biological systems. With steady scalar irradiation, the effect is cumulatively increasing.

**Resonance with multiple parts of the substructure:** More than one trigger pattern can be hidden in a single scalar structure. These scalar patterns, on encountering the human body, are dumped into the acupuncture plexus, central nervous system, cell membranes and other cellular structures, and the body’s overall “virtual photon” communications system. (32) The energies from the translated scalar patterns diffuse and accumulate throughout the body, finding their intended “trigger resonance” targets and stimulating them into forced resonance.

This effect can be used to create death or disease patterns, as in the Kaznacheyev experiments. (33) (Figure 20)

**Figure 20 – Death Transmission via Virtual Photons**



It can also be used to create “antidisease” patterns, as in the case of the Priore device that cures cancer and leukemia. (34)

Mild effects of this kind were and are apparently utilized by the Soviets in their microwave radiation of the personnel in the U.S. Embassy in Moscow. (35) The stimulus was deliberately kept fairly low, although three ambassadors were seriously targeted (36) to force consideration of the phenomenon by the highest echelons of the U.S. government and U.S. scientific community. By U.S. reaction (37), the Soviets were able to establish with 100% reliability that we knew nothing of scalar EM technology.

Recently examination and testing of a Soviet LIDA device has confirmed that it is possible to profoundly affect the human consciousness and mind by specialized electromagnetic means. (38)

The Soviet “Woodpecker” signals also appear to possess a direct potential for accomplishing mental conditioning and death and disease induction on a massive scale, or even earthquake production. (39)

**Delayed resonance with a target, displaced in time:** Either of the first two resonance modes can be utilized in an even more peculiar fashion. A scalar wave can travel in time only, sitting at one location and oscillating in time but NOT IN SPACE. Such a wave has no apparent immediate effect on the target, and does not “strike the trigger” as long as it is in the purely temporal mode. It does affect the target’s characteristics that exist in time—mass, inertia, rate of flow through time, etc. However, for weak waves these effects can be so minimal as to be unnoticed. The wave can even be constructed so as to decay from the temporal mode into the “normal spatial” (normal spatiotemporal) mode. As this occurs, the wave begins to “strike the trigger,” forcing it into resonance and producing the desired effects. Certain Chinese Chi masters, for example, were actually able to utilize this mechanism to produce the “delayed death touch” effect. Gilbey reports an actual demonstration of the effect in modern times. (40) At least part of the Kaxnacheyev effect may be due to this delayed resonance effect, where a transition is being made from the purely temporal to the spatiotemporal realm.

**Whole-pattern resonance:** This is somewhat analogous to the simpler case of sympathetic vibration, illustrated by two tuning forks tuned to the same frequency. When one is vibrated, the other goes into sympathetic resonance because of the impinging signal. With scalar patterns, many frequencies and multiple modes—especially nonlinear modes, which provide translation—are involved in a manner analogous to Fourier expansion. Also, scalar components can travel instantaneously—or in other words “through hyperspace.” Stimulating one scalar pattern by a specifically tailored scalar wave results in its twin pattern being resonated at a distance. The nonlinear portions of this “hyperspatial scalar resonance” result in translation in the distant twin target, so that “real energy” emerges in specific structures of that target. In this manner, radionics uses a “witness” (containing the scalar pattern) of an object to connect “human intent” scalar waves into the distant target. (41) For a target person, the witness may be a scrap of skin, photograph, etc. (Note that each body cell contains the genetic pattern of the entire body, and the light emitted from a body contains a scalar substructure with the exact patterns of the body impressed in it.)

Focusing human scalar waves intentionally into the witness affects the target by sympathetic resonance. Also, the effect is cumulative, much like charging a capacitor, so the effect can be made strong enough in the distant object for real energy to be kindled there, and the operator’s intent to be realized. Whole pattern resonance in the scalar mode, however, refers not to just a single frequency, but to the entire complex substructure of the scalar field.

**Adaptive resonance:** In this form of scalar resonance, a system functioning in a scalar fashion and as a highly disordered Prigogine system undergoes a “shaping” and “patterning” of the large-scale patterns that emerge and stabilize. That is, the internal dynamics of the Prigogine system itself are affected, shifting (and controlling) the emergent pattern toward that pattern of the “driver.” What we are saying is that the entire translated, ordered pattern that emerges from a complex, disordered, scalar Prigogine system is itself capable of “forcible entrainment” and adaptation by a highly complex scalar driver’s substructure. The substructure adds one additional inner level to Prigogine’s dynamics, opening up the capability for entrainment, control, and engineering. The degree of adaptive resonance that can be effected depends upon the degree of perfection of the Prigogine system being entrained. By scalar EM wave engineering in this fashion, the statistics of a particular situation can be made causal, or at least partially causal. An adaptive resonance device, by analogy, is one, which, under certain conditions, adapts its own complex substructure to fit or nearly fit the substructure of the driving scalar wave. (42).

**Mass current resonance:** In an electrical current, it is possible to separate the flowing electron masses from the flowing massless charge ( $\phi$ -dot). Exactly how to do this is proprietary to an inventor friend and colleague. Each separated current component is then capable of performing quite different things. The mass current, for example, when passed through a normal helical coil generates magnetic field. The mass current is subject to normal resonance conditions presently contained in the orthodox EM theory. (43)

**Massless current resonance:** The massless current– $\phi$ -dot–when passed through a normal helical coil does not produce magnetic field; instead it produces inertial field. (44) This scalar current is subject to all the scalar resonance conditions contained in the new EM theory. Also, the earth is a giant capacitive system, but one of complex structure. Its molten core, for example, is a Prigogine system and a giant translator. The sun is also a giant Prigogine system and translator, and it produces structured scalar waves of great power. The earth itself is in continual scalar resonance, driven by the scalar output of the sun, and its own molten core acts as a translator/receiver for the arriving scalar waves from the sun. Within the earth, enormous scalar waves and pulses are formed, with multiple frequencies, and these are partially translated into a great living, breathing pattern of scalar “life energy” and enormous ordinary energy. The earth’s scalar pattern is shaped and modulated by every structure in and on the earth, and in fact in the cosmos. The entire earth, solar, and cosmic system is in turn responsive to the feeble scalar inputs initiated by the living things that populate it. The cosmos itself is a living thing, and in one sense the earth, planets, sun, moon, and stars are all parts of our own extensive body.

Tesla knew that he could form special resonance with some of the powerful driver frequencies of the earth itself, and obtain enormous power from it, inexhaustible and unlimited—and clean. By establishing scalar (zero-vector) resonance between a giant elevated capacitance and enormous scalar currents in the earth, he would have directly tapped scalar anenergy and translated it into useful energy, and freed mankind. (Figure 21) The same dream drove T. Henry Moray to produce a direct tap into vacuum stress anenergy, translating the output into ordinary energy. Again, his device could have freed all mankind. Instead, both Tesla and Moray were suppressed in the West, and in the Soviet Union the fruits of their genius have been subverted to provide stupendous scalar weapons to destroy and enslave humankind.

**Figure 21 Tesla's Wardencllyffe Tower**



**Electrical ground:** Electrically the function of the ground is often poorly understood in normal EM theory. For a perfect ground, the requirements are. (1) It must furnish any number, frequency, and rate of electrons on demand from the circuit without itself generating any voltage or impedance drop. (2) It must accept any number, frequency, and rate of electrons from the circuit, without generating any voltage or impedance drop. This of course is the definition of infinite capacitance. However, it is possible to establish “capacitive resonance” between large (essentially infinite) capacitances without the movement of electron masses. That is, one can establish a scalar massless current resonance between capacitances. This was the real secret of Tesla’s magnifying transmitter. (45) It is not difficult to use the oscillating accumulations of phi-field that result, and cause real charged mass currents (ordinary electrical currents) to flow in a driven circuit.

One should realize that every frequency, every current, every wave, and every electrical change in the external circuit has its corresponding reflection in the electrical ground capacitance, particularly in its scalar (massless current, phi-dot) aspects.

And one should realize that, in the earth’s own electrostatic scalar potential field, the substructure is patterned to the finest detail. Every pattern, every thought, every emotion, every intent is there—both the physical and the “mental.” We respond to the system, and it responds to us, to at least a slight degree. (46)

## A BRIEF OVERVIEW OF HEALTH AND DISEASE

**The Body Electric:** The functioning mind and body are electrical devices, but in the expanded sense of the new electromagnetics, not just orthodox theory. This author has already shown an extended electromagnetic model where both mind and matter, and their coupling, are included. (47) This model is hyperdimensional; to the first order, the mind may be modeled as a 3-space, but one that is three orthogonal turns away (in infinite-dimensional space) from the ordinary 3-space physical universe. Indeed, the mind becomes part of the “nested structure of time,” and thus part of the substructure of ordinary electrical charge (massless component). The mind and body are in sympathetic, tuned resonance through hyperspace; i.e., from the third lower level of virtual state (charge state) to ordinary observer space (physical reality, or observed mass).

**Effect of mind on body:** Any sustained mental stress constitutes a sustained pattern imposed into and onto the hyperspatial charge flux that couples mind to body. This pattern is thus slowly kindled into and onto the bio-communication system of the body, and passes throughout the human nervous system and into and through each cell. Depending upon the orientation (fixed bias) of the individual's' mind/body coupling, this stress pattern will cause energy to be kindled into one or more specific body portions, resulting in interference and, if unrelieved, eventually in disease. Our common language reveals an unconscious knowledge of this: a stomach-oriented person may refer to the fact that he “can’t stomach” such and such, while a heart-oriented person may “not have the heart for it.” In the former case, stress is likely to result in physical expression in the stomach, and in the latter case in the heart. By the same token, activities—such as free play (NOT stressful competition!)—which relieve mental stress also relieve and break up the harmful kindling pattern in the physical body.

**Emotion’s role:** Actually, the word “emotion” simply means “move out.” It signifies that “something” moves out from the mind into the body, engendering body changes, body reactions, and behavior. The fundamental mechanism of “emotion” is kindling of patterns from the hyperspatial mind into the spatial body; through the hyperspatial resonant coupling of mind and body. The “something” that moves out from the mind is scalar resonant patterns; the kindling process results in real electrical and chemical changes in the body. The powerful endocrine glands act as “power stations” or “power amplifiers” for the emotional kindling effect, with a scalar resonant center associated with each gland. The resonant scalar center historically has been called a “chakra,” and its existence has been known for millennia in the Orient. The flow and kindling of anenergy patterns has been known for millennia also, and generally referred to as the flow of “chi” (China), “ki” (Japan), or “prana” (India). Scalar currents—i.e., chi currents—in the body flow through the meridian systems discovered by the ancient Chinese. Many scalar resonant points (acupuncture points) exist on the body, each associated with particular body locations and responses. Groupings of acupuncture points form plexuses, which are frequency sensitive. Thus scalar frequencies can affect specific plexuses of acupuncture points., affecting specific body parts, with specific functions engendered.

By Fourier expansion, a given scalar waveform can be designed to affect specific organs, areas, or structures and engender specific effects in the biosystem. This, for example, is the secret of Pavlita’s psychotropic generators.

The individual’s normal mental patterns in the relaxed or released state represents his basic “emotional tone.” When that pattern has essentially no harmful stresses or biases, then the

individual is in perfect health (perfect ease). When the pattern has harmful stresses or biases, the individual's health is hampered, and the normal functioning of the body is altered by the kindled energy in the body. The individual is then in a mentally-induced state of "dis-ease." All psychological treatment is aimed at releasing the stresses from the mind, thus releasing the kindling stress patterns in the body, and removing this mental cause of dis-ease.

In certain unusual cases, the mind can even interact with itself, or split itself into essentially separate, functioning, patterned groups or "personalities." This is the phenomenon of "split personalities." Again, treatment is aimed at reducing and eliminating the stress, which is responsible for the "splitting," so that the multiple personalities "merge" again into just one functioning patterned group.

**Consciousness of the observer:** The coupling between mind and body is two-way; that is, a hyperspatial flux flows from the mind into the body and a hyperspatial flux flows from the body into the mind. There is a "hysteresis delay" in the time elapsed from the kindling of one quantum change in the human body to the kindling of one quantum change in the mind. Indeed, one's "consciousness" (one's time awareness) is due to this hysteresis delay, as in one's "observation of the physical world." (48) Severe pressure in the mind may result in the intra-mental splitting into interacting groups or personalities, which may vie for control of the consciousness loop to the body and nervous system. The shifting of personalities will be evidenced by changes—often profound—in body chemistry, electrical system, life outlook, mental tone, etc.

**Effect of body on mind:** The body is both a tuned receiver and a tuned transmitter. The two-way coupling of mind and body means that every physical cell, organ, structure, and functioning has a counterpart in the coupled mind-world, due to hyperspatial feedback to the mind. (Similarly, every mental nuance has a direct counterpart in the physical body.) Since there are two intermediate virtual levels between body-world and mind-world 3-spaces, there are separate "hysteresis time delays" on these intermediate levels, nested inside the overall consciousness "hysteresis time delay." In an elementary sense, these levels—together with their infold time delays and patterns—allow intermediate functional groupings which are midway between "mind" and "matter," and which are intermediate levels of functioning INSIDE MASSLESS ELECTRICAL CHARGE FIELD (ELECTROSTATIC SCALAR POTENTIAL) itself. The simplest way to look at these intermediate levels is to regard them as SUBTLE ELECTRICAL BODIES, inside the electrostatic scalar potential, where we refer to the expanded electromagnetic meaning of "electrical." In this manner, there exists a real, physical (though virtual) electrical basis for those ancient Oriental systems, which classified functioning types of "etheric bodies" of an individual. Note that we are speaking of and in an expanded physics, not just "metaphysics." The overall functioning is highly complex, and beyond the scope of this paper; however, it is within the present scope to point out the solid physical basis for "subtle energy bodies" or internested "subtle energy fields" of a living bio-organism. Everything that goes on in the organism—in its mind, body, and intermediate subtle electrical bodies—patterns and structures the dynamic scalar field of the organism.

**Multiple mind levels:** It can be seen that the individual exists on several levels; indeed, he or she must be modeled in at least seven dimensions if mental, physical, and living attributes of the biological system are to be included in the model. One may thus speak of multiple "levels of mind" or "levels of consciousness," since consciousness and the hysteresis time delay in the



closed loop coupling between mind-world and body-world are one and the same thing. This accounts for various psychological systems and the conscious (singly conscious, single hysteresis delay loop), and subconscious (multiply conscious, multiple hysteresis delay loop) minds. With the new electromagnetics, psychology can be put on a solid physics basis, but that is beyond the scope of this present effort. All the mind levels, however, receive delayed kindling inputs from the physical body, so that body conditions do affect mind conditions. This is particularly true for infants and small children, where these loops are essentially “wide open” for impressing, without censorship or evaluation. Until physical experience has incepted substantial mental functional groupings, the infant and child-like mind is very much like soft wax, easily molded into conditioned forms shaped by the experienced environment. As the person matures, the conditioned personality responses become much firmer, and much of one’s conscious experience is evaluated and interpreted before passing into unconsciousness.

**Instinct:** We are born with certain preprogrammed mental functions and groupings. These include such things as beating the heart, reacting to pain and loud noises, and reactions to hunger, pleasure, pain, etc. Thus certain parts of one’s functional two-way mind/body coupling are already “hard-wired” and resonant. Indeed, one may build a case that all the basic instinctual memory engrams already exist, both as structures of cellular tissues and as hyperspatial analogues of those structures in the mind, and that future engrams are simply groupings of these engrams and their alterations. At any rate, a great deal of instinctual behavior is already preprogrammed in the individual at birth, and one is further conditioned by subsequent experience to modify, group, or process these inborn engrams.

**Learned response:** As we play the game of life, the complex interplay and interactions of our mind and body, and the intermediate electrical bodies, produce learned or conditioned responses. However, here we greatly extend the concept of conditioned response by specifically including all levels of the hysteresis loop in the mind/body coupling. We are constantly conditioned by our total environment and experience, not just by the experiences of which we are aware. These conditioned responses exist in the body, in the mind, and in the two intermediate electrical body levels (i.e., in the scalar electrical aura of the body). Each of us becomes ever more unique, and no two of us are exactly alike. Many of our learned responses are beneficial, but inevitably some of them are not. Note, however, that we are taking the view that all learned responses represent complex combinations and permutations of the NORMAL basic inborn hard-wired functioning of the system. That is, one’s learned “software” functions by interposing, interplaying, and intergrouping one’s built-in “hardware” functions.

**Pain:** Certain hardwired responses exist in the physical body’s coupling to the mind. One of these is a direct response to avoid or eliminate pain. This response is a survival mechanism, for pain is normally sensed and experienced when something is beginning to physically harm the body. The more intense the pain, the greater the automatic reaction engendered. Other hard-wired responses have been previously stated by this author (49) and include fear of being cut by sharp objects, fear of being pierced by pointed objects, fear of ponderous movement, fear of sudden or rapid movement, and fear of any threat to the eyes—particularly by sharp pointed objects.

**Disease:** Disease of the body is always caused by physical disruption of some part of its structure or functioning and, quantum mechanically, it is totally electrical in nature. (50)

**Disease from external causes:** Disruption can come from a multitude of more fundamental external damage, accidents, deliberate infliction, electromagnetic effects, chemical effects, ionizing radiation effects, etc. Note that all of these environmental causes produce physical changes in the body; i.e., in its physical structure and functioning, electrical functioning, cellular functioning, coherence, etc. According to quantum mechanics, all observable changes ultimately come from exchange of virtual particles; thus ultimately SCALAR FIELD CHANGES account for all damage to and malfunction of the body (51), since virtual particle exchange is a scalar field function. Rigorously, if we can directly engineer negating scalar field changes (i.e., deliberately engineer the primary virtual state interactions), we can radiate the body with them and cure or prevent any environmentally-induced disease whatsoever. (52) That, of course, will be the fundamental medicine of the future; for the present, we must concentrate on basic devices to promote or aid the body in healing itself from a variety of ailments.

George Yao's tailored microcrystal devices (Pulsor<sup>®</sup>) provide one example of the deliberate engineering of scalar resonance devices to dampen and correct scalar deltas in the body's expanded electrical system, thus directing the body's condition from dis-ease to ease (health). Present medicine, on the other hand, largely relies on drugs, surgery, radiation, and physical therapy to cure or alleviate disease, and vaccination to prevent germ-born and viral-born infectious diseases. Note that, quantum mechanically, all drugs and radiation produce effects by electrical means, at the virtual particle exchange level. All curative actions of the body itself also produce effects by similar virtual state electrical means. IN THE SENSE OF THE NEW ELECTROMAGNETICS, BOTH DISEASE AND HEALTH ARE TOTALLY ELECTRICAL STATES, DISEASE BEING SIMPLY A DEVIATION FROM THE NORMAL IN THE OVERALL QUANTUM MECHANICAL STATE OF THE BODY AND ITS FUNCTIONING.

**Diseases from within:** The initial cause of a disease may also be within the organism itself. For example, autoimmune disease is one form of disease caused from the body's susceptibility to its own agents or antigens. Again, the disease involves structural and/or functional changes in the body itself and—if we accepted the quantum mechanical fact that all physical changes are engendered by massless charge (virtual particle) exchange, then the root of all illness is electrical. (53) IT FOLLOWS THAT THE IDEAL TREATMENT FOR ANY ILLNESS IS ALSO ELECTRICAL, ONCE THE EXTENDED ELECTROMAGNETICS TECHNOLOGY IS DEVELOPED. (54)

## THE PULSOR<sup>®</sup>

**Description:** As previously stated, the Pulsor<sup>®</sup> is a resonant scalar field device invented and developed by George Yao. It is made of millions of specially designed and processed microcrystals in a suitable plastic container.

**Normal electrical effects:** First, a microcrystal is piezoelectric. That is, when mechanically compressed, the crystal produces an electrostatic voltage. (More exactly, it produces a delta in the electrostatic scalar potential field in which it exists and which surrounds it.) Application of an electric field produces contraction or expansion in certain directions. (More exactly, application of a “shadow E-vector” field results in internal charged particles moving themselves to comprise and compose an observable vector E-field.)

In addition, a microcrystal is electrostrictive. Conventionally viewed, it experiences a large elastic strain or distortion when exposed to an electric field. This strain can be independent of the polarity of the field, and generally is proportional to the square of the electric displacement.

Each microcrystal electrically may be viewed as having an inductance (delay in producing current from an applied voltage). When two crystals are placed together, the gap separating them constitutes a capacitance. A crystal’s inductance is thus coupled with the capacitance of each gap separating it and another microcrystal. Thus each microcrystal is part of a resonant “tank circuit” with every other microcrystal. The smaller the values of the resonant components of a tank circuit, the higher the frequency it is tuned to. The smaller the size of each crystal, the higher the frequency it is tuned to. The combinations and permutations of wave (frequency) additions and interferences also result in formation of large wavelengths and low frequencies.

In addition, every part, component, spacing, frequency, combination, and permutation is dynamic and changing. The entire Pulsor<sup>®</sup> thus is a pulsating, vibrating, highly dynamic resonator filled with a staggering number of interrelated resonances, frequencies, and phases. If not structurally layered, these dynamically changing interrelated oscillators essentially would simply cover ALL frequencies in a certain bandwidth, and at the same time would possess a fantastic substructure covering frequencies from near zero to gamma ray frequencies.

**Scalar aspects:** The translation to the scalar aspects occurs as follows: On the average, for any given single resonance in the substructure, there exists an out-of-phase counter-resonance. Thus an enormously dense scalar field emerges, with a scale substructure covering frequencies from near zero to gamma ray frequencies. The overall effect is to make the Pulsor<sup>®</sup> a giant scalar field crystalline generator.

The entire electrical and scalar effects of the microcrystal and Pulsor<sup>®</sup> are also enriched by magnetostriction and magneto-optical rotation effects. These effects also are interrelated and cross-coupled, and infolded into a highly complex scalar substructure.

The overall effect is that the Pulsor<sup>®</sup> becomes a crystal reactor, which reacts to essentially any change—scalar or vector—in its environment.

Further, the Pulsor<sup>®</sup> is electro-gravitational in its functioning. That is, much of its electrical energy is transposed to gravitational energy (curving space-time). It, thus, exhibits effects such as graviton-striction, which causes a normal electrical resistor to develop heat (and light) when scalar waves pass through it. This is further divided into graviton-electrostriction and

graviton-magnetostriction. Thus there are effects from the Pulsor<sup>®</sup> which can only be covered in a Kaluzaklein approach to electrogravitation, and which are not covered by the normal materials theory or EM theory.

**Aspects of the Pulsor<sup>®</sup>:** The Pulsor<sup>®</sup> is sensitive to environmental electrical and magnetic fields, and to scalar electrical fields. It is also a composite of several thin film components, and the composite has a cell-like appearance. These structures act as capacitors and as accumulators of resonant scalar anenergy. The multicrystal layer of these cellular structures with thin film separation functions somewhat like a transistor to ordinary electricity, and more like a human cell (with its double membrane and internal structuring) to scalar anenergy. In addition, multiple resonant frequencies are produced by the multilayered capacitors and lattice inductances when excited; these multiple resonances may themselves act as a Fourier expansion, yielding a specialized waveform. By controlling variables such as “spacing” between parallel capacitors, sizes of microcrystals, certain structural orientations, etc., a Pulsor<sup>®</sup> can be constructed for a desired frequency bandwidth to match one of the major frequency bandwidths of the human body.

Note also that each microcrystal is oriented randomly. The entire Pulsor<sup>®</sup> thus can be viewed as a “crystal” which has a gigantic substructure of internal orientations, electric and magnetic field oppositions, etc. On the whole, one may view the quiescent Pulsor<sup>®</sup> as a SCALAR CRYSTAL, with a highly complex substructure that sum-zeros while the Pulsor<sup>®</sup> is quiescent (not stimulated except by ordinary electrostatic scalar potential (space-time, vacuum). The Pulsor<sup>®</sup> thus produces and is immersed in a very large, dynamically substructured, scalar field.

Because of the composition of the microcrystals, the specific gaps and contacts, the disordered orientations, and the tuned resonances, the Pulsor<sup>®</sup> is extremely nonlinear. It thus can take on the characteristics of a highly nonlinear system far from thermal equilibrium (i.e., it can act as a “Prigogine system”)—particularly with respect to scalar waves, currents, and resonances. In the Prigogine mode it can function as a gating device from virtual state (scalar state) to observable state, and vice versa. The direction of the gating is determined by the type of stimulation.

In other words, the Pulsor<sup>®</sup> can act as a translator. It can translate “stress” of vacuum (scalar anenergy) into energy, and vice versa.

In addition, the Pulsor<sup>®</sup> becomes self-ordering in the Prigogine mode; in that mode, large scale (macroscopic) orderings (patterns) emerge from the microscopic and submicroscopic “disorder” and stabilize. Since the Pulsor<sup>®</sup> has a very great many degrees of freedom, then by Prigogine thermodynamics the stability of these emerging ordered forms (patterns) can be very high.

Further, the multiple resonances of the Pulsor<sup>®</sup> give it the capability to produce single or multiple scalar beams. These may intersect with the body’s own scalar resonant anenergy in a chakra to produce scalar interference, thus producing (kindling) “real electrical energy” (electron currents) in the orthodox sense. This real energy can physically affect the control and functioning of the powerful endocrine glands, the central nervous system, organs, etc. The scalar patterns and scalar anenergy, on the other hand, can affect the acupuncture points and meridian system of the body, producing direct chi stimulation of the entire body of any part, through simulation of the intermediate subtle energy bodies.

The Pulsor<sup>®</sup> is a stable Prigogine device deliberately constructed to resonate with one or more of the major scalar centers of the body and with the corresponding nodal points or centers in the two intermediate subtle electrical bodies. Thus any foreign pattern or delta introduced into the Pulsor<sup>®</sup>'s bandwidth affects and stimulates the Pulsor<sup>®</sup>, which automatically generates a precise counterpattern due to its high Prigogine stability. This counter-effect is somewhat analogous to the precession of a gyro; introduction of a disturbing force of one kind generates a resultant force of an entirely different kind. (53) In the "Prigogine crystal" Pulsor<sup>®</sup>, the counter-pattern is generated and amplified by the highly stable ordering process being fed by a myriad of disordered microcrystalline actions composing the substructure.

Another view or analogy is to consider the overall compensatory action of the Pulsor<sup>®</sup> to be similar to the action of a triode tube with direct feedback from plate to grid. When a disturbing signal voltage appears on the grid, a correlated signal appears on the plate. However, the plate voltage output in the conventional arrangement is 180 degrees out of phase with the voltage disturbance on the grid. If a direct feedback exists from this plate output to the grid, the triode can be adjusted to effectively "squelch" any disturbance of its grid. In analogous fashion, the Pulsor<sup>®</sup> generates a direct "negative feedback" to squelch a disturbing scalar resonance delta. The disrupting delta, of course, may come from environmental effects or from internal conditions of the body to which the Pulsor<sup>®</sup> is coupled; it makes no difference to the Pulsor<sup>®</sup>. Further, just as the triode, the Pulsor<sup>®</sup> also amplifies the counterpattern feedback it generates. In that fashion, a condition of the body that has taken a long time to accumulate and kindle sufficient energy to cause disease may be fairly quickly relieved by Pulsor<sup>®</sup> counteraction, which more quickly kindles "squelching" energy to remove the physical cause. Further advantage of the Pulsor<sup>®</sup> is that it simultaneously squelches the disease-inducing scalar delta patterns in the intermediate subtle electrical bodies.

**Special aspects of the Pulsor<sup>®</sup>:** We should accent that scalar waves travel from nucleus to nucleus between atoms. That is, a scalar wave passes through the electron shells, enters the highly nonlinear nucleus and is absorbed there. Another scalar wave is later reemitted from the nucleus, passing through the electron shells of the atom out into space, where it eventually encounters another atom, penetrating its electron shells and being absorbed in its nucleus.

The nuclei of the universe are thus in a constant fierce flux of scalar waves. Vacuum itself is comprised mostly of scalar waves. The arising and decaying of "virtual" particles and photons in vacuum is due to scalar interference between scalar waves.

Further, scalar wave changes—even so weak as to be nondetectable even in theory—can sometimes exert influence vastly out of proportion to their apparent magnitude. This is because that, when electromagnetic waves fight each other and turn into zero-vector gravitational waves, an enormous gain factor is involved. That is, if one could turn all the electric force between two electrons into gravitational force, one would obtain about  $10^{38}$  units of gravitational energy from each unit of electrical energy converted. Even if our scalar process is grossly inefficient, significant gain factors are involved. Thus a scalar electromagnetic (electro-gravitational) crystal such as the Pulsor<sup>®</sup> can exert effects completely out of proportion to the vanishingly small scalar currents processed. And specifically, its gravitational aspects are not measurable by an "electron detector" such as comprises most of our EM detecting equipment. Special detectors, however, will detect the scalar processes. The point is, if in a detector we convert the scalar activity to electron movement and hence move a needle, we may measure nanovolts in normal terms. Yet

the effect in the target (body) in a scalar resonant area may be far out of proportion to seemingly miniscule “energy input” we think we have in conventional terms.

The same thing is true, of course, for the “subtle electric” bodies of the human being. Small conditions or changes in these bodies—far too small for any normal EM instrument to detect—directly affects the human body in a profound manner because of the amplification factor and resonant accumulation of ordinary EM energy and physical changes in the resonant physical body portion. There exists a solid scalar electromagnetic basis—a thoroughly scientific basis—for the ancient idea of “healing the aura or auric bodies, but that is beyond the scope of this paper.

## **MODERN POLLUTION OF THE SCALAR AURA OF BODY**

There is a hidden, as yet unknown mechanism whereby pollutants—ions, EM fields and radiations, chemicals, etc.—pollute our bodies. We will briefly sketch this mechanism for the “electromagnetic smog” that beats upon us from all sides—radio and TV stations, 60-cycle currents in our houses and offices, ignition systems of automobiles, electrical distribution systems, switching, etc.

First, we visualize two of the EM waves meeting and interfering. At some subtle point (or more than one), the fields oppose and cancel or partially cancel. At this point there exists vector zero and a change in an energy of vacuum. This is a dynamic, highly effervescent change for passing waves, but it may become a regular or standing wave for two fixed sources such as two distribution lines, etc. Thus we are constantly subjected to electro-gravitational waves, spikes, potentials, and dynamic and static fields of the widest variety. Further, the “patterning” of this electro-gravitational (EG) smog that results from electromagnetic smog contains both fixed and varying components. It contains a wide variety of frequencies, many varying randomly. Accordingly, a variety of randomly varying Fourier transforms exists in this EG fog. Thus almost any structure of the body is randomly resonant to sporadic scalar EG structures that appear and disappear.

Note that mass itself acts as an accumulator or capacitor for scalar patterns and scalar radiation. Diffusion-type equations apply. We may speak of the “temperature” in a mass of some particular scalar pattern with which it is irradiated; the “temperature” is a measure of the accumulated intensity of that particular scalar pattern. Thus we must speak of the “temperature” of a particular scalar pattern, or we may speak of the “temperature” of the absorbed scalar resonance in a particular body structure that has been absorbing that pattern.

The impure, widely mixed nature of electronic smog results in an equally widely mixed nature of EG smog. The smallest “whole body” units of the body—in individual cells—are particularly vulnerable. So is the scalar (virtual EM) master cellular control system (discovered by Popp). The result is the increasing debilitation of the structures most affected by EG smog: the cell, resulting in an increase of cancer and leukemia, etc. (For example, one province in Canada has experienced a 30% increase in cancer each year for three years, according to data received from Michrowski). Diseases of the immune system are on the rapid rise—including such devastating killers as AIDS. More will result in the future. More and more, the treatment of the “newly emerging” diseases will become difficult or impossible with standard drugs and therapies. Eventually only scalar treatment of the body and scalar treatment (cleansing) of the EG smog environment will be able to provide an answer.

So we are in constant EG exchange with our environment in scalar electrical fashion. Whatever is in our environment—in the slightest degree—is in our scalar aura, and thus trickles slowly into (and hopefully out of) our physical body systems as time passes. In modern life one is constantly bombarded by hosts of pollutants, the electrical patterns of which directly affect the electrostatic scalar potential, thus permeating our scalar aura (subtle electrical bodies). These polluting patterns trickle slowly into and out of our subtle bodies, with some accumulation into our physical body via the kindling mechanism. Even the water in our cells exchanges the “pollution” pattern. Thus chemicals, radiation (both ionizing and nonionizing), electromagnetic “smog,” noise, electric and magnetic fields, etc. all introduce their pollution patterns in and through the body by EG means. Further, even the thoughts, actions, and emotions of other bio-organism—human and otherwise—contribute to the scalar patterns exchanged in and through our subtle energy bodies, body, and mind. The total environment—weather, sky, clouds, earth, grass, trees, structures, living organisms, and fields of all kinds—contribute to the scalar patterns exchanged in and through our subtle energy bodies, physical body, and mind.

**Chemical pollution:** Chemical wastes dumped in an area profoundly affect the scalar anenergy patterns of that area, and thus slowly and subtly affect all living things there. Even our agriculture poisons the environment, for Western agriculture has accented the use of chemical fertilizers. Recall that chemistry is based on charge, or more precisely, on “charged mass particle exchanges and interactions.” The massless charge portion, of course, is the scalar substructure of the electrostatic scalar potential, and is completely imbedded in a virtual particle flux exchange with the environment. Thus the massless charge (scalar field flux) patterns of any organism in the area is in an indirect interchange with the massless charge flux patterns of the chemical pollutants, through the medium of the natural electrostatic scalar potential of the earth.

From a scalar electromagnetics viewpoint, an even dastardlier thing is being done to our environment and to us. Presently the chemical companies have many hundreds of sites in the U.S. where they are utilizing “deep injection” disposal. That is, lethal chemicals of every variety are being injected into bore wells deep into the earth. What the companies do not know is that the scalar EM pattern of those chemicals is interacting via scalar waves through the earth and through and above the surface. A part of the EG smog that is polluting our subtle electrical bodies is composed of the EG smog scalar modulation of those deeply injected chemicals. A potential does not fall to zero until an infinite distance away from its source; that is simply standard EM knowledge. At the surface and above it, over a period of time, one can expect that the “temperature” of the scalar patterns from those deadly chemicals deep below will rise, with a concomitant rise in disease such as cancers, tumors, leukemias, immune difficulties, etc. As the immune system is assaulted, resistance to disease in general is lowered; even colds, influenzas, pneumonias, etc. begin to be much more lethal. The EG pollution of our environment is sowing the seeds for disease epidemics the likes of which have not been seen since the great plagues devastated Europe in olden times.

Of course, the entire effect on living systems is drastically speeded up if direct physical contamination enters the physical body, introducing the physical chemical changes (electrical charge patterns) directly and strongly. Nevertheless, physically poisoning the earth also poisons earth’s living electro-gravitational potential field, whether or not chemical ingestion by the organism occurs.

**Electronic smog:** All electrical and magnetic signals introduced into the environment permanently affect it. Recall that, in vacuum, these signals are actually patterns of longitudinal waves: compression and rarefaction (scalar longitudinal waves of massless charge flux) and circulation (swirl in the scalar waves or scalar field environment). All are shadow vectors. These scalar patterns are introduced into the subtle electrical bodies, and into the physical body by forward kindling (positive time stream) and into the mind by reverse kindling (negative time stream).

**Mechanical smog:** All rotating machinery, explosions, sounds, etc. produce purely electromagnetic effects at the quantum level. Thus their scalar electrical aspects also directly modulate the scalar environment, and permeate the subtle electrical bodies directly. The patterns are then trickled into the physical body and the mind by kindling.

**Overall effect:** Thus we can model the environmental exchange as one in which everything that occurs in the environment produces inputs into the mind, subtle electrical bodies, and physical body. Note that this includes both normal, harmless exchange from the natural environment and also pollution changes from environmental distortions artificially induced in the natural environment. Indeed, we may speak of the “scalar temperature” of a certain pollution pattern in the mind, a scalar temperature of the pattern in the subtle electrical bodies, and a scalar temperature of that pattern in the physical body. Such an analogy also suggests that there exist critical temperatures for each, at which certain physical changes in the human organism (and any living organism) begin to manifest. Certain subtle indicators already exist in systems, which are very sensitive to scalar pollution. As one example, nearly an entire species of starfish recently died; apparently the “critical temperature” for some effect on that starfish was breached, resulting in wholesale destruction of nearly all the members of that species. As a second example, a tree is a sensitive scalar detector and scalar wave absorber and translator. The acidic poisons from the large industrial and chemical wastes have steadily increased, which in turn has steadily increased the scalar EG smog being absorbed and translated by the trees. Now vast forests are seriously affected, and some of them are already dying—including the famed Black Forest in Germany. More are to follow as the temperature of the scalar EG smog continues to rise.

Note that, scalar-wise, we must consider the entire physical environment as alive, because scalar patterns from all living things exist in, and permeate, each and every cubic centimeter of it. Included, of course, are the life channels linking the mind of each creature to its body. The SUBSTRUCTURE of electro-gravitational scalar potential (vacuum space-time itself) is quite vividly “alive,” but not just “singly” alive.

Thus we may correctly speak of pollutants as producing a sick environment; scalar-wise, the living environment itself can be described as healthy or diseased. Most definitely it is now diseased. Again, we may speak of the specific scalar temperature of a given pollutant’s scalar pattern in the overall environmental electrogravitational potential.

For example, note the effect that chemical fertilizers actually produce. They accelerate the natural biochemistry of plants; in one sense they act as drugs and “uppers” to the living plants exposed to them. Literally, such agriculture produces effects in the living biosphere not unlike the application of drugs such as “speed” in human beings. Pollutant effects which are not “specific enhancers” (accelerators) act as sludge or noise in the living ESP, producing effects not unlike the application of drugs such as “downers” in human beings. Industrial noise, mechanical



shock and vibration, large rotating machinery, large power lines, radio and television stations, and even imperfect sewage systems produce scalar pattern analogs which are “downers” to the local environment. (54)

Further, each biological organism in an area is in a total scalar exchange with its environment. If the local environment is diseased, it produces disease effects in every living organism there. (55)

**Factors in environment treatment:** Since we can (and do) have a sick environment, we can also speak of “environmental treatment.” Specifically, we are interested in both local environmental treatment and –for long range application–eventual treatment of the entire environment. It is necessary to understand certain factors involved, before one can comprehend the means of treatment of either the local or total environment.

**Scalar pattern interconnectedness:** First, we note one particular fact: From a scalar viewpoint, structuring of scalar patterns into finer and larger patterns–creation of substructures and substructures–are indeed the engineering aspects of creating “giant photons.” For a given fundamental frequency, its first superharmonic (i.e., twice the frequency of the fundamental) is the first frequency of the higher band that becomes beautifully in phase with the fundamental. The total substructure of the fundamental giant photon can thus be expressed as a function of the frequency band between a fundamental and its first superharmonic. That is, we regard all higher frequencies outside the range of the fundamental to its first superharmonic as merely functions (superharmonics) of that range. Thus we regard the substructure of the individual giant photon as being a function of the frequency bandwidth between its fundamental frequency and its first superharmonic.

Similarly, the above fundamental itself is a sub-harmonic of the substructure of some part of any other giant photon. Without pursuing the complexity, it can be seen that, by this approach, each and every giant photon actually is connected to, and a part of, each and every other giant photon. And all giant photons and their interconnectedness are simply patternings, structures, and dynamisms in the overall electrostatic scalar potential.

Through this interconnected superstructure, changes are propagated nearly instantly. (56) Indeed, it is the view of this author that the speed of propagation may be approximated as an integral power of  $c$ , the speed of light, so that the speeds are  $c, c^2, c^3, \dots, c^n, \dots$  etc.

**Living range fundamental bandwidth:** For the purpose of producing scalar effects on biological systems, the frequency bandwidth chosen as a fundamental is from the infrared to the ultraviolet. Note that, as one starts from a particular base frequency in the infrared and progresses through higher and higher frequencies, one progresses to visible light and then to UV, in which one reaches the first superharmonic to the starting IR frequency. This IR-UV fundamental range is highly significant to the living organism. Both the IR and UV frequencies have been found to allow production of the Kaznachev effect. (57) In addition, the lethal frequency for one-celled organisms is in the UV. (58) Strangely, single-celled organisms have been “killed” in the dark by UV, placed in suspended animation for twelve generations, then revived by exposure to visible light. (59) From Kaznachev’s work, it appears that the major fundamental for the “life linkage” consists of, or at least involves, the near UV. And from the work of West German scientists, the linkage repeats in the IR, showing strong correlation to our basic life range fundamental of IR to UV.

**Pulsor<sup>®</sup> ranges:** In his construction of the Pulsor<sup>®</sup>, George Yao has applied the principle of the living range fundamental by producing units tuned to specific parts of the life range fundamental. Three major kinds of units for use in treating the living environment are available: red Pulsors<sup>®</sup> for the low (IR) region, blue Pulsors<sup>®</sup> for the high UV region, green Pulsors<sup>®</sup> for the intermediate (main-life) region.

**Red Pulsor<sup>®</sup>:** Certain Pulsor<sup>®</sup> constructions are attuned to the lower part of the living range fundamental bandwidth, and these are encased in red plastic to signify the IR. These red Pulsors<sup>®</sup> resonate most pronouncedly with the scalar energy flux in the lower subtle energy body and into the physical body. They especially affect the region of the pelvic center of the body.

**Blue Pulsor<sup>®</sup>:** Certain other Pulsor<sup>®</sup> constructions are attuned to the upper part of the living range fundamental bandwidth, and these are encased in blue plastic to signify the UV. These blue Pulsors<sup>®</sup> resonate with the scalar flux from the mind to and through the higher subtle energy body, and on into the physical body. They especially affect the mental and ego aspects of the individual, and the body region from the throat to the top of the head.

**Green Pulsor<sup>®</sup>:** Certain other Pulsor<sup>®</sup> constructions are attuned to the middle part of the living range fundamental bandwidth, and these are encased in green plastic to signify the green, living central “major” portion. These especially affect the emotions and the region of the body from the diaphragm to the throat center.

**Scalar filter Pulsor<sup>®</sup>:** In addition, a future Pulsor<sup>®</sup> construction will be sensitive to the frequency bands experienced by solid state electrical devices in their failure modes. Briefly, through the grounding (zero-vector) part of the circuit, a solid state device receives a “hash” of scalar pollutant frequencies and current from the electrical power circuit. (Refer back to our explanation of scalar conditions existing in electrical ground.) Normal filtering does not affect this scalar “hash” at all, since it does not affect the scalar structure of zero-ground. Accordingly, over a period of time the scalar “hash slowly kindles in nonlinear portions of the connected external circuitry. Solid state diodes and transistors are particularly vulnerable, since they are highly nonlinear devices by nature, due to their layered, “doping” construction. Solid state devices are routinely “burned-in” for a period to eliminate most ordinary failures and defects. In the remaining “good” burned-in solid state devices, a substantial percentage of future failures of is caused by cumulative kindling over time of the “scalar ground hash” inside the diodes and transistors themselves. In fact, the major “normal failure” mechanism for solid state devices is this effect.

A Pulsor<sup>®</sup> construction presently being developed by George Yao will resonate with this “scalar hash” to produce a negative, squelching, scalar delta pattern. This Pulsor<sup>®</sup> will act as a special scalar filter, removing the internal “scalar hash” from the electrical ground system and eliminating the major ordinary cause of solid state device failure. When protected by this filter Pulsor<sup>®</sup>, one may expect the mean time between failures (MTBF) for a solid state device to increase by a factor of 3 to 4. This Pulsor<sup>®</sup> will not be further discussed in this paper.

## TYPICAL USE OF THE PULSOR

The basic operation of the Pulsor<sup>®</sup> has already been explained in Paragraph four. Essentially, the Pulsor<sup>®</sup> reacts to abnormal scalar deltas produced in the body by pollutants or illness, producing a precisely negating scalar delta due to its inherent Prigogine stability. Thus the Pulsor<sup>®</sup> interacts directly with the subtle electrical bodies, producing effects in the physical body due to forward kindling, and in the mind due to backward kindling. In other words, the Pulsor<sup>®</sup> directly counteracts negative deltas in the entire mind/life-channel/body system. The Pulsors<sup>®</sup> are made in three frequency ranges, each affecting a portion of the IR-UV living fundamental range, and consequently affecting the pertinent portion of the body, subtle electrical bodies, and mind.

**Physical types of Pulsors<sup>®</sup>:** Pulsors<sup>®</sup> are made in a variety of types of containers, depending on how one intends to apply them.

**Additional remarks:** The purpose of each of these Pulsors<sup>®</sup> is to negate deleterious scalar anenergy patterns in one's subtle energy bodies, mind, body, food, water, and environment. Due to its unique construction, scalar resonance, and Prigogine stability, the Pulsor<sup>®</sup> has the ability to generate precise scalar counterpatterns against deleterious, unnatural deltas in our total environment. Thus the Pulsor<sup>®</sup> balances or "repolarizes" the body system, including all its subtle energy field and its life flow channels.

In the modern world, one is continually exposed to electrical bombardment from a variety of sources: Radios, television sets, fluorescent lightings, telephone systems, gas line scalar radiation chemical pollutants, sound, noise, shock, rotating and operating machinery (such as one's everyday automobile), jet engines, etc. One is also subjected to deliberate scalar patterns of harmful nature, introduced through the medium of powerful, long-range radiation of the northern Western hemisphere from the Soviet Union. In addition, the foods and water we ingest is also polluted by scalar patterns from all these things and more. Metal objects we carry on our body—zippers, watches, necklaces, rings, belt buckles, loose change, and costume jewelry—particularly act as antennas, collecting the energy-disorienting radiations and waves. Also, the background electrostatic scalar potential field serves as a direct coupling carrier between our subtle electrical bodies (scalar fields) and these harmful pollutants.

The Pulsor<sup>®</sup> has been designed to protect one from the daily bombardment of destructive and harmful electrical pollution from all these sources, because these pollutants alter the body's natural polarity and scalar substructure, eventually resulting in problems such as chronic tension, frustration, headaches, continual apprehension (anxiety), and pain. Chronic exposure to the pollutants results in any one or more of a wide variety of disease conditions being slowly kindled into the physical body. The accumulation of these chronic patterns can also be countered by regular use of Pulsors<sup>®</sup>.

### **Additional information:**

The Pulsor<sup>®</sup> will not prevent such effects as radiation burns, but will maintain the bodily natural subtle energy functions, particularly its natural scalar anenergy functions. Thus the natural ability of the body to heal itself is enhanced, giving enhanced recovery.

The nervous irritability of persons is primarily due to a disturbance in their subtle energy (scalar anenergy) fields. The Pulsor<sup>®</sup> can also produce countering patterns for this condition, stabilizing and repolarizing the nervous condition of the person.

The Pulsor<sup>®</sup> has optical properties and its emissions have kindling properties. Sometimes the Pulsor<sup>®</sup> will expose photograph plates after sufficient kindling time (e.g., 72 hours) has elapsed.

To the psychic or clairvoyant (i.e., one who uses his two cerebral hemispheres in a scalar interferometer mode), the Pulsor<sup>®</sup> typically exhibits a gas-like flame surrounding it.

The Pulsor<sup>®</sup> affects everyone, but only a few perceive its scalar field operation directly (psychically, or by the scalar interferometer use of their cerebral hemispheres in a detection mode).

Since water absorbs scalar anenergy and anenergy patterns, it also absorbs the scalar pattern radiation of Pulsor<sup>®</sup>. Water can be charged up with scalar energy, including the scalar energy from the Pulsor<sup>®</sup>.

The Pulsor<sup>®</sup> will act on the 7<sup>th</sup> vertebra and its associated nerve system to stimulate a stomach reflex. The Pulsor<sup>®</sup> applied directly to the stomach, or near it, will activate a stomach reflex, aiding in digestion and relieving tension around the shoulders and neck region.

Some persons feel the stroking of the Pulsor<sup>®</sup> along their skin. This is due to the fact that the skin has been shown to have a vertical electrical field gradient. Hence a difference in scalar potential exists between the inside and the outside of the skin. That is, the skin acts as a SCALAR CAPACITANCE, and accumulates scalar flux from its internal and external environments. A CHANGE in the skin's external scalar environment is invoked by "stroking" of the Pulsor<sup>®</sup> nearby. Thus scalar currents are induced in the skin by the stroking Pulsor<sup>®</sup>, where they can be detected by the sensitive synaptic firings of the nerve endings in the skin. A sufficiently sensitive person can be consciously aware of this effect. (60)

The Pulsor<sup>®</sup> anenergy can be detected by most persons as a drawing, pricking, and creeping feeling.

The Pulsor<sup>®</sup> directly induces anenergy and anenergy patterns into people, through the several mechanisms previously described in detail.

## NOTES AND REFERENCES

1. Many of these major flaws are listed in Bearden, T.E., “Comments on the New Tesla Electromagnetics: Part 1: Discrepancies in the Present EM Theory.” Tesla Book Company, 1580 Magnolia Avenue, Millbrae, CA 94030, 1982.
2. Specifically, a new “conservation of energy” law emerges, of which the present law is only a special case. Vacuum has no “energy” as such, but has infolded “energy turned against itself,” in the form of spatiotemporal stress (anenergy). Spatiotemporal stress is simply “potential,” which is gravitational potential,” which is energy turned against itself (infolded). This anenergy of vacuum can be tapped and unfolded into ordinary energy (every virtual particle emission already does precisely that in ordinary physics). Thus “free energy” is readily achievable by means of the new electromagnetic approach. Vacuum, space-time, electrogravitational potential, massless charge, and the virtual state are all identically one and the same thing.

There exists a “zero quantum,” which has no “unfolded energy,” but possesses “infolded energy” (anenergy). Further, each quantum—including the zero quantum—has a substructure of “infolded quanta,” and hence “infolded stress energy.” Quantum change does not occur until the infolded energy of the quantum unfolds. A specific subquantal structure can be deliberately constructed and utilized. Indeed, scalar EM waves move through (and organize) these subquantal substructures—i.e., through the “virtual state.”

Resonance becomes a much more complex thing than it is in present physics.

Newton’s third law, as we know it today, is only a special case of a more fundamental law; in the extended third law, the “equal and opposite” reaction still occurs, but it need not be observable, need not be singular, need not be local, and need not be antiparallel. (There are many new ways of being “equal,” and many new ways of being “opposite.”) A photon becomes a much more complex thing: in essence, each photon has a substructure of infolded energy (anenergy)—i.e., of opposing photon/antiphoton pairs. The entire structure is referred to as a “giant photon,” and the “giant photon” can be deliberately constructed almost according to specifications. The new approach is a unified field theory, because a more primary mechanism now generates force itself; force being an effect and not a cause.

The probabilities and statistics of a given situation are themselves subject to deliberate causative control, in violation of the assumptions of present quantum mechanics. Virtual state engineering is readily accomplished, and many more types of controlled interactions are present in the new physics than were contained in the old. The new approach also encompasses mind and intent—something the present physics only palely alludes to by use of “the observer.”

3. Bearden, T.E., “Comments on the New Tesla Electromagnetics: Part 1: Discrepancies in the Present EM Theory;” “Part II: The Secret of Electrical Free Energy,” Tesla Book Company, 1982.
4. Bearden, T.E., “Toward a New Electromagnetics: Part III: Clarifying the Vector Concept,” Tesla Book Company, 1983.

5. Bearden, T.E., "Toward a New Electromagnetics: Part 4: Vectors and Mechanisms Clarified," Tesla Book Company, 1983. Presentation delivered to the 1983 Annual Conference of the U.S. Psychotronics Association, July 20-24, 1983 at the University of Portland, Oregon.
6. Bearden, T.E., "Part I: Solutions to Tesla's Secrets and the Soviet Tesla Weapons," and Ratzlaff, John T., "Part II: Reference Articles for Solutions to Tesla's Secrets," Tesla Book Company, 1981. See also Bearden, T.E., "Tesla's Electromagnetic and its Soviet Weaponization," *Proceedings*, Tesla's Centennial Symposium, Colorado College, Colorado Springs, Colorado, 1984 (in publication, 1985) for extensive documentation of Soviet weapons testing.
7. These currents are "virtual" and in opposition to each other. Vectorially, then, they sum to zero. That is, they are real but have no observable vector resultant.
8. Observably, the passage of an object through time and through space (through gravitational scalar potential, which is what vacuum space-time is) is the result of the interactions of absorbed and emitted photon envelopes with the object. Photon emission and photon absorption account for the vectorial translation through time and space, and the particle's spin locks in an amount of "trapped scalar resonance," which accounts for its mass, inertia, and gravitational condition.
9. Note that the present "definition" (actually not a definition but a working statement) of electrostatic scalar potential (ESP) states that its magnitude represents the work that must be accomplished against a unit charged mass to push it in from infinity against the charged field potential. Therefore the ESP field represents accumulated energy, expressed in all directions. Thus it represents the stress of vacuum space-time, and contains infolded "energy" in that stress.
10. For a good description of the Aharanov-Bohm effect, see Richard P. Feynman, Robert B. Leighton and Matthew Sands: *The Feynman Lectures on Physics*, Vol. II, Addison-Wesley Pub. Co., Reading, MA, Fourth Printing July 1966, pp. 15-10 through 15-14. For a review of the related literature prior to 1970, see H. Erlichson, *American Journal of Physics*, Vol. 38, 1970, pp. 162. See also D. Home and S. Sengupta, "A critical reexamination of the Aharanov-Bohm effect," *American Journal of Physics*, Vol. 51, No. 10 October 1983, pp. 942-947. A particularly significant list of further related references is attached to Home and Sengupta's article. Perusal of the references quickly shows the confusion physicists are in, regarding the Aharanov-Bohm (AB) effect. For example, the AB effect is regarded as essentially a quantum-mechanical effect which vanishes in the classical limit (see T. H. Boyer, *American Journal of Physics*, Vol. 40, 1072, pp. 76). However, note that the "free A-field" is a "shadow vector," and not an "observable vector." Thus obviously it would be a QM effect, since it is subquantal (virtual), and would vanish in the classical (observable) limit. The difficulty is that the vector concepts, being utilized by the physicists to comprehend the AB effect, are themselves in error.

11. Note that the electrostatic potential is not due to the “charged masses” per se, but due to the increased intensity of the “spray” of virtual particle flux the accumulated charged particles produce. The ESP is the virtual particle flux—the massless charge, not the mass. At a spatio-temporal point, the magnitude of the ESP represents the intensity of the stress upon and in space-time (vacuum), since it represents the amount of anenergy (infolded energy) existing in space-time at that point. ELECTROSTATIC SCALAR POTENTIAL IS A “STRESSED” ENTITY AND ITS VALUE REPRESENTS THE MAGNITUDE OF ITS INTERNAL STRESS, AS DOES ANY POTENTIAL.
  
12. Tesla adamantly insisted that Hertz waves did not exist in vacuum. In his words, “The Hertz wave theory of wireless transmission may be kept up for a while. But I do not hesitate to say that in a short time it will be recognized as one of the most remarkable and inexplicable aberrations of the scientific mind which has ever been recorded in history.” (Nikola Tesla, “The True Wireless,” *Electrical Experimenter*, May 1919, p. 87. Tesla was right and all the textbooks are wrong. Specifically, transverse electromagnetic waves are actually precession waves in gases made of observable spinning charged particles (such as the electron gas in a transmitting antenna and in a receiving antenna). Electromagnetic waves in vacuum are “longitudinal” or “sound” waves, as Tesla noted. (In the modern view, the vacuum ether is a special sort of “gas” comprised of particles which suddenly appear out of nowhere and then vanish, so quickly that they cannot be “observed.”) But since one almost always MEASURES disturbances in the electron gas in the probe to his instrument, and does not measure what is actually in the vacuum, one MEASURES transverse Hertz waves. The transverse aspect is simply due to the precession waves in the electron gas. Early EM theorists did not know of the electron, and did not know of its spin and precession. Hence they erroneously concluded that they MEASURED what was actually in the vacuum, and set up EM theory correspondingly. All the present EM wave theory thus is set up in accordance with what we MEASURE in charged particle fluids, NOT in accordance with what is in the vacuum in the absence of spinning electrons.
  
13. E.g., see Belyaev, B. N., “On Random Fluctuations of the Velocity of Light in Vacuum,” *Izvestiya Vysshikh Uchebnykh Zavedenii, Fizika*, No. 11, Nov. 1980, pp. 37-42 (original article in Russian; translation by Plenum Publishing Corp.) The very careful work of Veinberg in 1903 clearly showed the difference in the speed of light yielded by measurement on earth and measurement in space. Experimentally the speed of light is not a constant, but is subject to fluctuation. See also Lotstsi, M., *The History of Physics* (English Translation), Mir, Moscow, 1970. This book contains the following assertion: “Terrestrial measurements give systematically a value for the velocity of light which is higher than that obtained by means of astronomical methods; the reason for this is unknown.”
  
14. See Bearden, T.E., “Toward a New Electromagnetics: Part 4: Vectors and Mechanisms Clarified,” Tesla Book Co., 1983.
  
15. *Ibid.*, Parts 3 and 4.
  
16. *Ibid.*, Part 4.

17. *Ibid.*, Part 3.
18. *Ibid.*, Part 4.
19. *Ibid.*, Part 4, p. 43.
20. Thus in some fashion the electrostatic scalar potential—i.e., massless charge intensity—must represent an accumulation of energy in an unusual form; i.e., the ESP is energy that has been converted into massless charge.
21. Let it be accented that vacuum has no “energy” per se, for energy is not conceptually equal to stress. Instead, the vacuum has stress, or infolded “energy fragmented and set against itself.” This vacuum (space-time) stress is more properly referred to as “anenergy.”
22. Note that the present linear conservation of energy law assumes that the spatiotemporal stress of vacuum does not change across the system in which energy is being conserved. However, local spatiotemporal stress (i.e., a locally curved space-time) may provide a steady sink or source for energy, depending upon the nonlinear translation conditions established. If the stress of the vacuum varies significantly within the local system, then energy need not be conserved therein. Note also that the stress of the vacuum, the massless charge of the vacuum and the stress on the virtual state are all one and the same thing. Note also that, in present physics, as is well known the emission or absorption of a virtual particle always violates the conservation of energy. The reason is simple: emission or absorption of a virtual particle adds to or subtracts from the vacuum’s local virtual particle flux. This represents an increase or decrease in the charge of the vacuum, hence of  $\varphi_0$ , hence of the “infolded energy density” of vacuum. Thus the vacuum is either giving anenergy to an absorbing particle (which converts the anenergy to energy), or taking energy from the emitting particle (in energy converted into anenergy). So one is dealing with the particle’s and the vacuum’s infolding or unfolding of energy.

To prove that not all crows are black, one only need exhibit one white crow. And to prove that the “conservation of energy” law is not inviolate, one need only exhibit a single case of its violation. The emission or absorption of a virtual particle already constitutes such a “white crow” in particle physics. Thus THE EXISTENCE OF A CHARGED PARTICLE ITSELF PROVES THE VIOLATION OF THE CONSERVATION OF ENERGY LAW, BY THE PRESENT MODEL OF CHARGE AS A VIRTUAL PARTICLE FLUX ON AND OFF A BARE MASS.

Also, the concept of energy itself is greatly confused in conventional physics. For one paper touching on some very pertinent aspects of that confusion, see G. Falk, F. Herrmann and G. Bruno Schmid, “Energy forms or energy carriers?”, *American Journal of Physics*, Vol. 51, No. 12, December 1983, pp. 1074-1077.

23. At best, the “time dimension” is an “unzipped” dimension, broken into pieces so short as to be of virtual length. It is thus a “shadow” dimension, as indeed are length dimensions. Since time and length can be intertransformed, then “the flow of time” also represents “the flow of length.” Actually it is space-time, which is flowing; that is what the “virtual particle flux” on a bare particle of mass is, in a charged particle system. Any charged particle is constantly



absorbing and emitting space-time. Space-time is NOT just a “mathematical framework,” but rather it is a FLUX.

24. I stress how important this concept is. E.g., see Lapkovskii, A. K., “Relativistic Kinematic Equations and the Theory of Continuous Media,” *Soviet Physics Journal*, Vol. 21, No. 6, June 1978 (December 1978, translation from *Izvestiya Vuz Fizika*). Although a translation of the paper itself is not available, the translated abstract reveals a new Soviet approach to the theory of continuous media. The fundamental concept utilized is “a piece of the medium.” Another Soviet article in my files refers to the rigorous placing of physics itself upon the concept of a piece of the vacuum medium. For a measurement of the angular momentum of vacuum itself, see Graham, G.M. and Lahoz, D. G., “Observation of static electromagnetic angular momentum in vacuo,” *Nature*, Vol. 285, (1), 15 May 1980, pp. 154-155. For a purely geometric model of a fundamental particle, see Battey-Pratt, E.P. and T. J. Racey, “Geometric Model for Fundamental Particles,” *International Journal of Theoretical Physics*, Vol. 19, No. 6, 1980, pp. 437-475. Also see Ebon, Martin, “Moscow, June 11, 1977,” in his book, *Psychic Warfare: Threat or Illusion*, McGraw-Hill Book Co., New York, NY, 1983, pp. 1-11 for a good description of the Toth/Petukhov incident of June 11, 1977. A 20-page manuscript handed to Bob Toth, a *Los Angeles Times* reporter, by Soviet scientist Valery G. Petukhov caused immediate pickup of the two men by the KGB. They were charged with passing Soviet state secrets. Specifically, sensitive words regarded as classified were “micro-organism self-radiation...” in association with “...by means of vacuum particles in space.” The Soviets, of course, know that micro-organisms (and indeed larger organisms) radiate scalar EM waves as “self radiation.” They also know this is longitudinal radiation, whose “photons” are “little pieces of vacuum.” Indeed, there is reason to believe that the entire Soviet classified energetics program is based on this new kind of physics. For a crude derivation of Newton’s laws of motion (relativistic form) and the square law of gravitation, see Bearden, T. E., “Quiton/Perceptron Physics: A Theory of Existence, Perception, and Physical Phenomena,” Defense Technical Information System, 1973. In that paper I called a little piece of the vacuum medium a “quiton,” and used the concept to crudely derive Newton’s laws of motion and the law of gravitation.
25. See Bearden, T. E., “Toward a New Electromagnetics: Part 4: Vectors and Mechanisms Clarified,” Tesla Book Co., 1983, pp. 26-27,58.
26. Cf P. Glansdorff and I. Prigogine, *Thermodynamic Theory of Structure, Stability and Fluctuations*. Wiley Interscience, New York, 1971. In 1977 Ilya Prigogine received the Nobel Prize for originating the theory of thermodynamics of a nonlinear system far from thermal equilibrium. I. Procaccia and J. Ross, *Science*, Vol. 198, p. 716, 18 November 1977 describe Prigogine’s fundamental work, which shows that such a system can indeed demonstrate negentropy. Out of the unrestrained disorder there can and does arise order, contrary to the old thermodynamics.
27. The Prigogine effect is also involved in the remote production of earth stress lights from stressed quartz-bearing rocks in the earth, fed by massless currents ( $\phi$ -dot). For an excellent scientific investigation of earth-stress lights, see Wiedemann, C. Louis, “Results of the N.J. ‘Spook Light’ Study, *Vestigia Newsletter*, Vestigia, RD 2, Brookwood Rd., Stanhope, NJ

07874. See also “Mystery Lights—a Further Update,” *Vestigia Newsletter*, Winter 1978, p. 5. For another photograph of an earth-stress light, see Don Moser, photographs by Blair Pittman, “Big Thicket of Texas,” *National Geographic*, Vol. 146, No. 4, October 1974, pp. 504-529. It also appears that, under certain circumstances, the human brain itself can act as a sort of “Prigogine crystal.”

- 28.** In the linear case. If the case is highly nonlinear (i.e., if the ambient stress of the vacuum varies significantly across the interference zone), then more or less energy may be produced in the interference zone than exists in the total of the two interfering waves.

Let us amplify this point. Rigorously, in the modern unified view, the only thing that exists in the vacuum is gravitational stress, which is what vacuum space-time is in the first place. The “dimensionality” of this space-time vacuum is five (Kaluza geometry, unifying electromagnetics and gravitation) or greater—11-dimensional in the Grand Unified Theories using Kaluza-Klein geometry.

If the stress of vacuum is the same throughout a region, the space-time in that region is said to be “linear”—in other words, things are existing in a “Lorentz frame,” and special relativity applies. In that case, the conservation laws (of mass/energy, momentum, charge and spin) rigorously apply.

If the stress of vacuum appreciably differs throughout a region, the space-time in that region is said to be “nonlinear” or “curved,” and general relativity applies. In that case, the conservation laws do not necessarily apply.

However, when Einstein formed his theory of general relativity before World War I, scientists did not know any means of appreciably curving space-time, except by means of a giant collection of dense mass, such as a star or sun. So Einstein assumed that, locally, the space-time is not curved, and special relativity applies locally. Only out by the sun or the distant stars, etc. would space-time be appreciably curved so that general relativity applied. Thus ordinary general relativity, as still taught in all our universities, has a serious limitation: It is not “unrestricted” general relativity at all, but rather it is a sort of special relativity with “distant perturbations.” This of course saves the conservation laws, and as long as this assumption holds, the conservation laws are not violated.

Accordingly, scientists have embraced a strong mystique that general relativity cannot be locally engineered, and the conservation laws cannot be locally violated. It is fashionable then to sneer at “free energy machines” as “perpetual motion machines” and as physical impossibilities. This is ignorance of the rankest sort; in fact, local general relativity is easily engineered, and a “free energy machine” that powers itself and also provides external energy for other uses is also quite possible. At this writing, there are several associates of the author who have working models of such machines, and are pushing hard to go into production.

Scalar electromagnetic (electrogravitation) ALWAYS involves a locally curved space-time, and violation of one or more of the conservation laws is nearly always possible. But to return: what actually exists in vacuum is gravitational stress potential. There are currents (bleedoffs) in this potential, just as the variations of pressure in a fluid can generate flows or bleedoff from high pressure to low. Such a bleedoff or current constitutes “force vector” in conventional theory. (Actually, it constitutes the “shadow” of one; if charged mass is then “hooked” to the current, it moves, constituting an observable force. (Nobelian Rechar Feynman puts it succinctly when he says that the electric and magnetic force fields in vacuum actually exist as the “potential” for a force to exist there).

Thus in the modern unified view all forces come from gravitational field (curvature of space-time). Any “kind” of force represents the “kind” of bleedoff of the nonlinear gravitational potential that takes place. Since a potential represents stress, which represents forces locked against each other so that they sum to zero, then it follows rigorously that, by summing multiple electromagnetic “force fields” to zero against each other, we create an artificial gravitational potential. This is the secret of electrogravitation (scalar electromagnetics). Electromagnetics is the unrestrained bleedoff of the gravitational field in certain specific ways, and if multiple such bleedoffs are pitted against each other so that they vectorially sum to zero and hence make a flux, they make an artificial gravitational field (curvature of space-time). This is the long sought secret of gravitation and antigravity. Scalar electromagnetics is a process of directly converting EM field force and energy into G field force and energy, and vice versa.

In passing, we also point out that there is no such thing as “the” gravitational field per se. Rigorously, gravitational field is simply a curvature of space-time and many sorts of potentials and other things can curve space-time. Any or all these are gravitational in nature. “Gravitational field” in the modern view consists of the variation of any or all of a conglomerate of things, which collectively comprise space-time. With scalar electromagnetics, then, we easily perform general relativistic engineering.

Pulsor<sup>®</sup> theory, for example, cannot be understood except in terms of the new electrogravitational viewpoint.

- 29.** Note that some firewalkers are also fire handlers. That is, they also pick up and hold red hot coals with their hands—or even blisteringly hot steel chains in their mouths, as demonstrated by one practitioner from Australia on the “That’s Incredible!” television show, broadcast on Monday, December 26, 1983.
- 30.** Note that the present linear concept of “frequency” must be drastically expanded. Any “frequency” now has a zero-sum substructure, which may be patterned.
- 31.** All matter—particularly in the nuclei of atoms—possesses such nonlinear resonances. Accordingly, mass itself acts as a “scalar capacitance” and can be “charged up” with scalar energy (and “discharged” as well.) In fact, this effect has been the bane of several unsuspecting unorthodox free energy researchers. In fiddling with “strange electromagnetics,” they have produced scalar waves and scalar patterns for an extended period of time, effectively “charging up” the local area in which they are experimenting. As is well known by quantum physicists, the present “conservation” laws are statistical laws, which work on the average. Now the statistics of these laws can be biased by scalar charging of an area. In that case, for example, one might be able to produce a certain free energy reaction, repeatable, in that area. Yet if the device is moved a significant distance, it is out of the charged, statistically biased area and thus the old conservation laws again apply. Several legitimate inventors of free energy devices have been astounded when the device failed to work when moved to a different location. In such case, what must be done is to keep the same equipment running in the original location, then simultaneously produce a similar effect at another location with a second identical device. One must keep building additional devices and relocating them, “spreading the scalar charge pattern” that biases the statistics of conservation of energy in the particular fashion being used by the invention. After several

widely separated stations are on line and working, the entire earth charges up with the pattern. Thereafter, that particular device and effect will work anywhere on earth at any time, and any of the devices can be relocated at will. Professor William Tiller, one of the few scientists who is aware of such an effect, refers to it succinctly as “growing the archetype,” and indeed I am much indebted to him for pointing out the basic concept to me.

32. The body’s intercellular virtual-state communication system was discovered by Dr. Fritz A. Popp of West Germany. See Fritz Albert Popp, “Photon Storage in Biological Systems,” *Electromagnetic Bio-Information*, Urban and Schwarzenberg, Baltimore, Maryland, 1979, pp. 123-149.
33. V.P. Kaznacheyev et al, “Distant Intercellular Interactions in a System of Two Tissue Cultures,” *Psychoenergetic Systems*, Vol. 1, No. 3, March 1976, pp. 141-142; “Apparent Information Transfer Between Two Groups of Cells,” *Psychoenergetic Systems*, Vol. 1 No. 1, December 1974, p. 37; “Conditions Necessary for Appearance of Distant Intercellular Interactions after UV-radiation,” *Bulleten Experimentalnoy Biologii i Meditsiny*, No. 5, 1979, pp. 468-471 ( in Russian). Kaznocheyev and his fellow researchers found that any kind of death and disease pattern could be transmitted through the ultraviolet frequency channel from one cell culture to another, under appropriate conditions.
34. See Priore, Antoine, French Patents #3,280,816; 3,368,155. Also Priore, A, “Procede et Dispositif de Production de Rayonnements Utilisables Notamment Pour le Traitement de Cellules Vivantes,” Republique Francais: Brevet d’Invention P. V. No. 899,414; No. 1.342.772, 1963. For two decades Antoine Priore of France has cured all manners of cancers and leukemias in laboratory animals with his machine, built and funded by the French government. Briefly, he creates a strong magnetic field, capable of penetrating an animal’s body through and through, assuring that every cell in the body is penetrated. The magnetic field serves as carrier for multiple modulations placed on it in a huge tube containing a giant plasma (which acts as a translator). Thus Priore is doing “scalar wave engineering” and constructing giant photons, which penetrate the body. The substructures of these giant photons interact with nonlinear trigger resonances in each cancer cell, kindling energy directly into the targeted cell. Priore’s real genius is that he has found patterns which do not affect normal cell resonances, but directly interact with the different trigger resonances existing in cancerous cells. Thus to the normal cell, exposure to the beam is rather like combing the hair, while to a cancerous cell it is rather like being placed directly in the radiation from a microwave oven. The cancer cell receives kindled energy that destroys it. However, the cancer cell’s scalar contribution to the body’s overall bio-communication system has affected the scalar substructure of every cell in the body. Therefore the entire body of host—every cell—must be exposed to the Priore machine’s radiation. For a virtual-photon approach to the cellular bio-communication system of a biological organism, see Fritz Albert Popp, “Photon Storage in Biological Systems,” *Electromagnetic Bio-Information*, Urban & Schwarzenberg, Baltimore, Maryland, 1979, pp. 123-149. For a good summary article about Priore’s work, see Rorvik, D. M., “Do the French Have a Cure for Cancer?” *Esquire*, July 1975, pp. 110-111, 142, 144, 146, 149. See also Bateman, J. B., “Microwave Magic,” Office of Naval Research, London, ONRL C-14-77, 1977; and “A Biologically Active Combination of Modulated Magnetic and Microwave Fields: The Priore Machine,”

Office of Naval Research, Report Number R-5-78, 1978. See also Courier, R., "Expose par M. le Professeur R. Courier, Secretaire Perpetuel de L'Academie des Sciences fait au cours d'une reunion a L'Institut sur les Effets de la Machine de M. A. Priore," 1977.

35. For a good description of the Soviet microwave radiation of the U.S. Embassy in Moscow, see Brodeur, Paul, *The Zapping of America*, W. W. Norton & Co., New York, 1977.
36. Two U.S. ambassadors died of cancer and a third, Ambassador Stoessel, suffered a mysterious blood illness, debilitation, and bleeding from the eyes.
37. Such as complete official disbelief that the microwave radiation could be an active inducing agent for anything. Eventually, of course, aluminum screens were installed—which reduced the ordinary radiation some 90%, but reduced the scalar waves not a whit. If one knows nothing of scalar waves, substructures, and giant photons, one will never understand the strange effects induced in personnel in the U.S. Embassy in Moscow.
38. See "Soviet Device Uses Radio Waves as Tranquilizer," *Huntsville Times*, (Associated Press release). (The AP release was carried by many other U.S. papers as well). The LIDA machine uses a 40 MHz carrier and specialized waved forms to induce tranquilization of a mammal in a few minutes. It can affect either an animal or a human. Dr. Ross Adey, Chief of Research at the Jerry L. Pettis Memorial Veterans Hospital, Loma Lima, California, tested the machine and verified its results. He even transfixed a cat in two or three minutes of exposure to the machine's radiation. The effects lasted some 30 to 40 minutes after the machine was turned off. The article credits Dr. Adey with the observation that the LIDA machine may have been a forerunner of a device that is presently bombarding Europe and the United States with powerful 6 to 30 MHz radio waves. That is, the LIDA may have been a forerunner of the Soviet "Woodpecker" transmitters. For the manner in which the "woodpecker" signals entrain the brain and synchronize it to a known time base, see Bearden, "Soviet 'Woodpecker' Signals," *The Excalibur Briefing*, Strawberry Hill Press, San Francisco, CA, 1980, pp. 258-261.
39. Since the mid-70's, the Soviet Union has been bombarding Europe and the United States with powerful signals in the communications band (6-30 MHz). The sound of the chirped waveform is similar to the sound of a "woodpecker's" beak striking wood, hence the nickname "woodpecker." Officially these transmitters are adamantly tagged as "over-the-horizon radars" by the U.S. intelligence community, which knows nothing of scalar wave technology, as evidenced by its complete lack of understanding of the microwave radiation of the U.S. Embassy in Moscow. (Neither does the U.S. scientific community, to whom the intelligence community must turn in such cases.) Using specifically tailored giant photons, the "woodpecker" signals could accomplish weather engineering on a continental scale—and this author has recently uncovered evidence that the anomalous weather experienced by the U.S. in the spring of 1983 and in the winter of 1983-84 is directly due to Soviet weather engineering. For an expose of such weather engineering, see Bearden, *Soviet Weather Engineering Over North America*, 1-hr. Videotape, P.O.B. 1472, Huntsville AL 35807 (\$40 postpaid, VHS or Beta).

Also, the “woodpecker” could accomplish mind control, death and disease induction, and other biological effects on a frightening scale. It could also accomplish earthquake induction in distant target areas. And of course it could also perform over-the-horizon radar functions if really needed to keep orthodox radar analysts happy!

40. Gilbey, John F., “The Delayed Death Touch,” *Secret Fighting Arts of the World*, Charles E. Tuttle Co., Rutland, Vermont, 1963, pp. 13-22.
41. For a good description and history of radionics, see Russell, Edward W., *Report on Radionics: Science of the Future*, Neville Spearman, London, 1973.
42. The two cerebral hemispheres of the human brain seem to be such adaptive scalar resonance devices with enormously deep and rich substructuring capabilities. The cerebral hemispheres can apparently be used in either a transmitting or receiving mode, and in a scalar interferometer mode for either transmitting or receiving. It may thus produce energy at a distance and cause psychokinesis, or extract and “scan” an energy from a distance, producing such things as clairvoyance and remote viewing. All the phenomena of parapsychology can be explained by scalar electromagnetic (electrogravitation) mechanisms.
43. Except that one may produce a magnetic wave that possesses no electrical field, in violation of present theory.
44. Apparently the Soviets have long since discovered and used this effect in their classified weapons research. A Soviet Scientist would of course not be permitted to write of this directly, but if clever, he might slip it through the official censorship in a reverse fashion. Of Gonyaev, V. V., “Experimental Determination of the Free-Fall Acceleration of a Relativistic Charged Particle. II. A Cylindrical Solenoid in a time-independent Field of Inertia Forces,” *Izvestiya VUZ, Fizika*, No. 7, 1979, pp. 829-833. Gonyaev details that exposure of an ordinary helical coil to an acceleration field produces an electrostatic field about the coil. By reversing his work, one sees that rotating an electrostatic field around the coil—i.e., producing a scalar massless current through the coil, which produces a “free A-field” around it—should produce the inertial acceleration field. In fact Frank Golden, a close colleague of the author, has apparently succeeded in separating an ordinary electrical current into two components: (1) a current of chargeless masses of the electrons. He found that the mass current, when run through an ordinary helical coil, generates an ordinary magnetic field. The massless charge current, run through the same coil, generates an inertial field and not a magnetic field.

The natures of gravity and antigravity have been hidden for these many years because of our fundamental errors in the conceptual foundations of electromagnetic theory and in the conceptual foundations of vector theory. The axiom of vector mathematics that establishes the zero vector actually makes all zero vectors equal. It makes of the zero vector a special case: the absence of all finite vectors. However, in the view of quantum mechanics, force fields are caused by operators operating on the potentials. These potentials, and the operators, may continue to exist when the force vectors sum to zero. Therefore a zero vector resultant of multiple, summed nonzero vectors can actually remain a dynamic system. In that case, the zero vector actually represents a patterned, deterministic gravitational potential. So when EM fields in vacuum sum to zero, they should not be replaced with a zero vector, but rather

with a gravitational potential. Only if this potential is completely negligible in its effects on the system being examined is one justified in using the zero-vector replacement.

45. Tesla used a gigantic elevated capacitance, very high voltage, and a very deep and extensive ground plane. By oscillating ordinary signals between the elevated capacitance and ground, he could adjust their frequency to correspond to earth resonances. In that case the earth itself would establish in-phase scalar (zero-vector, superconducting) resonance between the elevated capacitance and the earth capacitance, and furnish enormous energy to his transmitter, which acted somewhat as a triode. That is, Tesla would input the normal grid signal in resonance with the earth, which would furnish a much larger cathode-to-plate power. In other words, the earth would feed power into Tesla's resonant signal in phase, greatly amplifying the power output of the transmitter. A modification of this technique is presently used by the Soviets to obtain enormous power from the earth to power large Tesla weapons, such as hemispherical dome shields of glowing energy, scalar electromagnetic howitzers, etc.
46. Indeed, Sheldrake's morphogenetic field is simply the ordinary electrostatic scalar potential, the waves in that field are scalar waves, and the currents in that field are scalar currents.
47. See Bearden, *The Excalibur Briefing*, 1980, pp. 165-182.
48. *Ibid.*, pp. 165, 180-181.
49. See T. E. Bearden, *Yoseikan Aikido*, 1973 (privately published).
50. I.e., ultimately everything is a pattern, whirl, condensation, flux, etc. in electrostatic scalar potential (space-time, vacuum). Thus it is a dynamic pattern in a scalar field.
51. See note 50 above. Everything is a dynamic microscopically; hence simply patterns of dynamic changes in gravitational potential.
52. Any physical structure or damage, chemical or electrical disorder or malfunction, or disease condition is simply a dynamic pattern in electro-gravitational potential. Energy, e.g., is condensed anenergy (virtual particle flux, vacuum, space-time, massless charge, ESP). Mass, being condensed energy, is thus simply even more condensed anenergy (ESP). The diseased pattern of the human differs from the health pattern of the human by some delta, which itself is a pattern in ESP. It follows that, if we can generate the counter pattern and sufficiently instill it in the patient, we can correct or eliminate the delta ESP pattern that represents the departure from health. Hence in theory any disease of disorder at all may be corrected by electrical means, in the extended sense, and that will inevitably become the medicine of the future as scalar electromagnetic technology is developed.

Indeed, we make an even stronger statement. It is theoretically possible to engineer or construct a mind itself, then a mobile physical form or "body," and link them together into a functioning, living being, and this too will become possible with the new technology. Here nature seems to have preceded our development of such technology. For direct evidence of the initiation or creation of lights that react to humans, see Bearden, "Fay Clark's Fireflies,"

*The Excalibur Briefing*, 1980 pp. 92, 94. For the experimental proof of atmospheric lights (UFO's) that react to human observers, see Harley D. Rutledge, "A Very Subtle Phenomenon," *Project Identification: The First Scientific Field Study of UFO Phenomena*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1981, pp. 236-243.

53. Specifically, when a disturbing force acts on the gyro's axis, the axis precesses in a plane in a plane at right angles to the disturbing force. Actually this is only a special case of a more fundamental gyroscopic phenomenon. The three-dimensional gyroscope is spinning in a plane (and in time) about a 1-dimensional axis. The physics of a 4-dimensional gyroscope exhibiting spherical spin has yet to be written. Suffice it to say that, microscopically, a thing and its motion are not separate, but are a single 4-dimensional "smear." This smear, in turn, can spin (and does) in an extra dimension, since it has an extra degree of freedom. The net result is that the precession force of a gyroscope's spherical spin is rotated an additional right angle from the ordinary precession force. Since the ordinary precession force may lie anywhere in a plane at right angles to the disturbing force, the spherical spin precession force must be at right angles to this plane, and must still deviate from the disturbing force. Only one solution to this is possible: the spherical spin precession force lies at 180 degrees to the disturbing force—or in other words, it is antiparallel to it. This is the mechanism that generates Newton's reaction force in his famous third law of motion!

Note that, in Newton's second law, two things are actually involved. (See "Newton's Laws of Dynamics," Douglas M. Considine, Ed., *Van Nostrand's Scientific Encyclopedia*, Fifth Edition, Van Nostrand Reinhold Co., New York, 1976, pp. 1612-1613.) The second of these things involved in the second law is that a force can only change the momentum of a targeted mass in the line of the force. If this were rigorously true, then targeted mass could not exert a force back upon the mass introducing the disturbing force—note that, for the targeted mass to exert a force in a given direction, it must accelerate in that direction, according to the first part of Newton's second law. Thus in the new approach, Newton's third law seems to be in conflict with his second law. How does one explain such a paradox?

By the new approach, it is straightforward. First, at the fundamental level every mass is made up of charged particles, even a neutron is continually changing into charged particles and back, according to the quantum mechanics. Thus all the particles comprising a mass may be regarded as charged.

Now that "charge" of a particle is due to a virtual particle flux onto and off its bare mass, and this virtual flux is spatiotemporal. That is, it is a flux of space-time, to and from the spatial bare mass of the particle. To the 3-dimensional mass observer—whose "measurement" is spatial and represents the spatial intersection of the charge flux—this flux appears to be a time flow onto and off the bare particle. That is, a positive time flow onto the object and a negative time flow off the object exist to the external observer.

In Newtonian (classical) physics, one only considers the positive flow to time, yet actually both positive and negative flows exist, and are equal in the linear (unaccelerated) case.

In the new approach, the force is COMPRISED OF the particle and its motion, in one unseparated smear. (This accords with quantum mechanics, for at the quantum level a thing cannot be separated from its motion; only an inseparable "smear" of the two exists). Therefore the disturbing force upon the target mass actually exists in both the positive time



flux and the negative time flux. In the negative time flow, the disturbing force exists in the opposite direction. Hence it generates its own reaction force, for it IS its own reaction force.

Another way to see this in the new approach is to realize that, to a particle considered in positive time, its “antiparticle” is itself traveling backwards with respect to positive time—i.e., in negative time, it is its own antiparticle. Since in the new view a vector is comprised of a particle and its motion in one “smear”, then we may speak of a “vector” (in positive time) and an “anti-vector” (in negative time). The vector (positive time) is its own anti-vector (negative time). Any force (positive time) is its own anti-force (negative time); hence any action force generates an equal and opposite force in the linear case. The insightful reader will immediately notice that acceleration is nonlinearity; thus extraordinarily strong acceleration represents substantial nonlinearity. Hence in such conditions the reaction force need not be equal, and need not be antiparallel. The literature also substantiates that this effect can be achieved by electrostatic scalar potential alone; cf. Bloch & Crater, “Lorentz-invariant potentials and the non-relativistic limit,” *American Journal of Physics*, Vol. 49, No. 1, 1981, pp. 67-75.

54. Thus there exists a real scientific basis for the ancient view that the earth system is alive (“Mother Earth”), the sun is alive and inseminates the earth with its phenomenal scalar anenergy output, and that local regions have distinct living characteristics or “personalities” (divas).
55. One now can see the true long-term cumulative implications of pollution by industrial wastes, nuclear wastes, nuclear explosions in the biosphere, chemical wastes, etc. From the scalar poisoning of the living biosphere, every living biological organism on earth is eventually affected and sickened.
56. We state without proof that this interlinking of all photonic structures provides a direct supraliminal mechanism to explain the experimental verification of Bell’s theorem. All the interlinkings are direct, composite subparts of the electrostatic scalar potential. Any CHANGE in the ESP is already known to be propagated essentially instantly throughout the universe, by ordinary theory. See John David Jackson, *Classical Electrodynamics*, Second Edition, John Wiley & Sons, New York, 1975, p. 223.
57. Kaznacheyev himself produce the effect in the near UV. Scientists at the University of Marburg in West Germany have duplicated the effect in the IR.
58. The germicidal effect of UV has a very sharp maximum at 3200 angstroms. See Lewis R. Koller, *Ultraviolet Radiation*, Second Edition, John Wiley & Sons, Inc., New York, 1965, pp. 236-237.
59. Cf Waldemar Kaempffert, “‘Dead’ Organisms Revived,” *Science in the News*, *Science Digest*, May 1950, pp. 77-78 (condensed from the *New York Times*); “Rejuvenating Light,” *Scientific American*, May 1949; “Death-Rays and Life-Rays Discovered,” *Science Digest*, February 1950, p. 56 (from *New York Times*). For germicidal effects, the “death” frequency seems to be at 2,5347 angstroms, while the “life” light seems to be at 3,659 angstroms, according to the latter article.

**60.** This is also the basic mechanism involved in dermovision, although for the phenomenon the person must be even more consciously sensitive of the subtle differences in scalar substructures of incident light and/or scalar radiation.

# A PARTIAL GLOSSARY FOR SCALAR ELECTROMAGNETICS AND SUBTLE PHENOMENA

© 1985 Tom Bearden

1. Action—the fundamental constituent of physical reality. Basically composed of two quantities—energy times time momentum times length, etc. Action is nonobservable; only changes in action are observed, and then only partially (in the linear case). The photon is the basic quantum of action, consisting of a piece of energy welded to a piece of time, with no seam in the middle, so to speak. All physical things are composed of rates of changes in action. The physicality (volume characteristics) of space are created bit by bit from action quantum changes in and on each fundamental particle of mass, at a very high rate of speed. These action changes are totally internal to the mass itself. Therefore, literally the physical universe exists inside each and every part of itself, and is a great hologram.
2.  $\bar{A}$ -field—vector magnetic potential. The  $\bar{A}$ -field is a real field—not a mathematical convenience as was originally thought—as detailed in the second volume of Feynman’s three volumes of physics. Indeed, it may be separated from the magnetic field, as the experiment reported by Feynman details.
3. Angular momentum—the momentum or “leverage” of the momentum of a moving body, with respect to an axis or reference point. Has the same units as action, or energy x time, or momentum x length.
4. Antimatter—matter consisting of atoms which are composed of positrons, antiprotons, and antineutrons. Also loosely refers to the antiparticle corresponding to a particle—the antiparticle may be regarded as the particle traveling backward in time.
5. Antiparticle—a counterpart to an ordinary fundamental particle, having identical mass lifetime and spin, but with charge and magnetic moment reversed in algebraic sign.
6. Artificial potential—potential formed by deliberately summing force field vectors to a zero vector resultant. The type of potential made by the zero summation depends upon the type of force vectors summed. For example, summing electric field vectors to zero produces an electrostatic scalar potential; summing magnetic field vectors to zero produces a magnetostatic scalar potential of vacuum. All such potentials represent warps or curvatures in vacuum/space-time. The locked-in energies of all the component force vectors constitute the “anenergy” of the artificial potential. Potential is analogous to “pressure” in fluids. An artificial potential polarizes the vacuum and constitutes a specific pattern in it. Thus vector-zero summed systems of individually finite vector components may all differ from each other.

An energy component may be coupled into energy, which can be compacted into mass. The conservation of energy law is replaced with a more fundamental law, the conservation of an energy.

7. Bearden's criterion—persons who have not seen or experienced a particular paranormal phenomenon have no qualification or expertise to comment on any aspect of the phenomenon, except with respect to its reported statistics.
8. B-field—the magnetic induction  $B$ . This is defined, analogously to  $\vec{E}$ , by the force it exerts. The force on a point charge moving in a magnetic field is at right angles to the velocity vector of the charge and also at right angles to the magnetic field. Actually, the H-field was originally named the magnetic field and the B-field was named the magnetic induction. This is an annoyance because it is  $B$ , which produces or involves the force, and hence should be named the field. Other writers have noted this discrepancy, and Sommerfeld called  $H$  the magnetic excitation—which correctly describes its role—rather than the magnetic field.
9. Biofield—a hyperfield, particularly with reference to the fields of a living biological system. Also bioframe, bioworld, hyperfield, hyperframe, hyperworld, orthofield, orthoframe.
10. Bohm-Aharonov Effect—Effect whereby interfering electromagnetic potentials can produce effects on charged particle systems, even at a distance and in the absence of the electromagnetic force fields. When  $\vec{E}$  and  $B$  fields are zero in a region, their potentials still exist and interference of the potentials produces real electromagnetic effects (energy) in the interference zone, even at a great distance, without transmission of “energy” per se through the intervening space. The Bohm-Aharonov effect highlights some of the stark differences between the classical view of electromagnetics and the quantum mechanics view. In classical EM, the force fields are the real causative agents while the potentials are only mathematical creations for convenience in calculation. In quantum mechanics, it is the potentials that are real and fundamental; the force fields are effects derived from the potentials by differential operators. In classical EM, when the  $\vec{E}$  and  $B$  fields are zero in an area, there is no more electromagnetics going on there; in quantum mechanics, the potentials still exist and may still cause real effects. By the use of artificial potentials, the Bohm-Aharonov effect can be made macroscopic and used to cause action at a distance—even significant action at a very great distance. Thus scalar EM interferometers can produce energy effects at a distance. The negative Bohm-Aharonov effect also exists. If the potentials of the transmitters in a scalar interferometer are biased highly negatively, then energy is extracted from the distant interference zero, reappearing at the transmitters. Tesla proposed a “Big Eye” that could see at a distance; actually he planned to use a negatively biased scalar interferometer, scan the beams, then reassemble the scanned energy appearing back at the transmitter/receivers. In this way he had a crude picture of the distant conditions in the interference zone. Such a device can see through the earth or ocean to a preselected intersection depth, since scalar EM waves can be made to pass readily through the earth or sea.
11. Brain wave—a rhythmic fluctuation of the voltage between various parts of the brain, normally ranging from about 1 to 60 Hertz.

- 12. Burst, burst-in**—the sudden collection or condensation of an energy into a frame, so that observable light or electromagnetic energy (or rarely, physical matter) appears (is kindled). Sudden kindling of an energy into energy.
- 13. Cerebral hemisphere**—each half of the cerebrum, the enlarged anterior or upper part of the vertebrate brain. The two cerebral hemispheres may function as a scalar interferometer to sense distant scenes (even distant in time), or produce energy and signals at a distance.
- 14. Charge**—the repetitive, “locked in” massless virtual particle emission and absorption activity (flux) of and on a fundamental particle such as an electron. Vacuum is identically pure massless charge flux. In the new theory, the intensity of the charge flux on a particle is also directly related to the rate of the particle’s passage through time. The continued absorption and emission of photons by a particle provides the general mechanism by which the particle moves along in time in little jumps. In the scalar EM view. The relativistic change of the rate of flow of an object through time is due to a change in its ambient vacuum charge potential—i.e., to a change in the rate at which it is absorbing and emitting virtual particles and scalar waves. The negative charge is associated with a positive time flux and the positive charge with a negative time flux. A positive charge is also a negative charge moving backward in time. All particles have clouds of virtual activity patterns; essentially all mass is charged since these clouds contain charges. In ordinary electrical physics, charge is defined in terms of force and force in terms of charge, and charge and charged mass are erroneously made synonymous.
- It is important to remember that a charge particle is a special sort of high-pressure “pump” and “vacuum cleaner” at the same time. So is a “magnetic pole” or a “potential.”
- 15. DeBroglie wave**—a matter wave. The quantum mechanics wave associated with a particle of matter, which can give rise to interference effects. An orbital electron in an atom is associated with a standing deBroglie wave on a Bohr orbit. DeBroglie waves always move faster than the speed of light, the speed being given by  $c^2/v$ , where  $c$  is the velocity of light in vacuum and  $v$  is the velocity of the particle of mass. DeBroglie wave velocities thus vary from the speed of light to infinite speed (everywhere at once). In his speech accepting the Noble Prize, deBroglie emphasized that, since these waves produce real physical effects, they are real and must not be regarded simply as mathematical conveniences.
- 16. Electrostatic scalar potential ( $\varphi$ )**—virtual photon stress on the 4-dimensional space-time medium (on the vacuum-ether). (Note that the vacuum can be regarded as consisting of the sum of a large group of such potentials.) The spatiotemporal intensity of the massless charge (of the virtual photon flux through a spatiotemporal point). Nikola Tesla discovered pure longitudinal scalar  $\varphi$ -waves. Present spatial  $\varphi$  in the ordinary theory is only a special case.  $\varphi$  can be visualized as a special type of “pressure” in an  $n$ -dimensional fluid, where  $n$  is equal to or greater than 4. By omitting the potential’s stress on time, present potential theory eliminates the potential’s ability to affect everything existing in time (for example, gravity, fundamental constants of nature, inertia, mass, rate of time flow, mind, life, etc.) It also eliminates the direct engineering of local general relativity, and the concomitant violation of the conservation laws (momentum, energy-mass, charge, spin, etc.) Present electrical theory—and indeed all of physics—is drastically in error by this serious omission. Direct engineering

of artificial potentials by patterned zero-vector force field summations is the secret of the direct engineering of local general relativity, and physical reality itself.

- 17.** EMP (electromagnetic pulse)—a sharp pulse of electromagnetic radiation produced when an explosion occurs in an unsymmetrical environment, especially at or near the earth’s surface or at high altitudes. Essentially the same as an electromagnetic shock wave, a wave of great intensity which results when waves with different intensities propagate with different velocities in a nonlinear optical medium. An EMP is also produced when two intense longitudinal scalar electrostatic potential wave patterns meet and couple into a sudden flash of vector EM energy.
- 18.** Energy—the capacity to do work. Energy is directly tied to the work concept, which is the result of a force moving through a distance. However, “work” refers to the past; that is, the force has moved through a distance against a resistance. “Energy” refers to the future; the force could in the future move through a distance against a resistance. Since the force is tied in turn to a changing mass motion, it follows that—conceptually—energy is tied directly to mass systems. The “energy” that an object possesses depends also upon the observational situation: a moving observer may see a moving object as possessing more or less energy than the lab observer sees. Electrostatic scalar waves do no work and individually have no “energy” per se. Two different scalar waves coupled onto a spinning charged mass, however, produce a system, which has mass and energy, and does work.
- 19.** Ether—originally, a ghostly-thin material, fluid medium postulated to fill space and carry electromagnetic waves, similar to the way in which a gas carries sound waves. The Michelson-Morley experiments eliminated any such material ether, but not a Lorentz-invariant nonmaterial ether (of which vacuum itself is one example, in the modern view). Maxwell’s equations were derived from ether theory. Einstein once proposed that the vacuum, complete with its electromagnetic fields, should be called the ether. Indeed, the word “ether” is again acceptable in the literature in context of its modern meaning. Today the “ether gas” is considered composed of virtual particles—that is, the particles spontaneously come into being and then vanish so quickly they cannot be individually detected. That is, today the ether is a virtual particle gas—sort of a gas of “effervescent bubbles,” so to speak. Ives derived special and general relativity, Newton’s laws of motion (relativistic form), and the square law of gravitation from a Lorentz-invariant nonmaterial ether theory. Zero-point energy of vacuum would also seem to be Lorentz-invariant ether. The Soviets are believed to have applied and advanced the Ives theory as part of their present theory of energetics, which is highly classified by the Soviet Union. In the new approach, vacuum is identically pure massless charge (virtual particle flux), and thus an ether as Einstein proposed.
- 20.** Flux—the amount of some quantity (such as energy, particles, volume of fluid, etc.) flowing across a given area (usually a unit area perpendicular to the flow) per unit of time. The term flux density is now more commonly used. Loosely, “flux” refers to the perpendicular flow through an area, while “flux density” refers to the magnitude or intensity (rate) of the flux. In some cases such as a flux of particles of different velocities, the number of particles may be multiplied by the average velocity to give an average flux density.

- 21. Frame (of reference)**—a spatial, organized, measured lattice placed in emptiness (space, space-time). Normally refers to a 3-dimensional, spatial frame. All objects and points in the “universe” or spatial frame are considered to simultaneously coexist at separate, measured points in the frame. Differs from the vacuum in that, rigorously, vacuum has no existing definite lengths and no existing definite time intervals, as these appear only after measurement/detection, and are relative to the observer and to the detection process. The “laboratory frame” is the static reference frame of the observer/measurement. A separate reference frame may be assumed to exist for any fixed or moving object, or centered on any point in another frame. When a type of frame is assumed, the entire class of physical interactions that can occur has been restricted to an assumed set or type. In other words, given the frame, the physics has been assumed. One of the greatest restrictions of an assumed “frame” is to rule out the consideration (existence) of other higher dimensions. In the new theory, higher dimensions are permitted and an orthogonally rotated frame can be equated to a field and vice versa. Therefore frames are also fields.
- 22. Frame (Lorentz)**—a frame of reference, which is not accelerated with respect to the laboratory observer. In this case, the frame may be rotated (moving at a constant velocity) but it is not rotating (the frame is not accelerated with respect to the observer, and space-time is not curved). In this case special relativity applies, as do the conservation laws. If the local space-time is curved, the frame is accelerated and spacetime is curved. Locally, then, general relativity applies. In this case, locally the conservation laws (energy, momentum, charge, and spin) can be violated. However, in ordinary general relativity it has been tacitly assumed that locally the curvature of space-time is negligible. Hence locally a Lorentz frame is assumed, and the conservation laws are assumed to apply locally also. In scalar electromagnetics, the local space-time is always curved and general relativity applies locally. In this case, the conservation laws need not apply.
- 23. Gravitational field**—rigorously, the curvature of space-time. There is no such thing as “the” gravitational field; instead, there exist a large number of potentials and other entities, which change the energy density of vacuum and bend space-time. The conglomeration of all these components constitutes the gravitational field. Note that flow between pairs, triads, etc. of these components can occur without appreciable change of the overall conglomerate potential of gravitational field. Thus the gravitational field can have a dynamic, structured pattern, and local space-time can be curved and patterned. E field and B field are two such “pairs” of flows where little overall gravitational effects are evidenced, so long as the fields are free to “flow.”

In Kaluza-Klein 5-d unification of gravitation and electromagnetics, only a single field—the 5-dimensional gravitational field—really exists. Our world intersects and “bleeds-off” this 5-d G-field in two fashions: (1) The 5-d G-field prefers to bleed-off into its fifth dimensional aspect, which we see as our own ordinary EM field. (2) The remaining 4-d aspects we see as our 4-d gravitational field. To show the order of magnitude difference in bleed-off, the electrical field between two electrons is about  $10^{38}$  or so stronger than the gravitational field between them. Even for protons, the ratio is  $10^{33}$  or so. So it can be seen that, so long as EM is permitted, little 4-d gravitational effects are produced. Our normal electromagnetics, then yields negligible gravitational effects.

On the other hand, if we deliberately set the EM bleed-offs against each other so that they zero sum, we “strangle” the escape or bleed-off of the 5-d G-field into EM field. The 5-d G-field is then forced to bleed-off into 4-d G-field. If we then vary the energy of each vector component of the EM zero sum while maintaining the overall zero resultant, we directly pump the 4-d gravitational field. Scalar electromagnetics thus directly converts EM field, force, and energy into ordinary G-field force and energy, and vice versa. In addition, we get enormous gains: For every unit of EM energy we feed into the “zero sum pump,” we can get out up to  $10^{38}$  units of 4-d gravitational/inertial energy.

Experimental results have confirmed this thesis. As early as 1969, Hurvich produced an inertial field generator capable of “freezing” weapons so they cannot be fired. Hutchinson reports and demonstrates the levitating of up to 60-lb. objects. The American physicist Hooper patented electro-gravitational devices in the early 70’s. Bedini, Watson, Johnson and others have developed practical prototype “free energy generators.” Orthodox research in this area is just beginning in the West, but has been highly developed for several decades in the Soviet Union.

24. Gravity—the phenomenon characterized by the physical attraction of any two material bodies. Ideally, the gravitational force between two masses is proportional to the product of the masses divided by the square of the distance between them. In the new approach, one recognizes that mass itself is defined in terms of, and identically consists of, the time derivative of an action flux. Gravitational field and electrical field, then, become different aspects of the same thing. By affecting the flow of time, scalar waves and scalar potential thus are able to affect the gravitational force between two objects. Antigravity, for example, can be achieved, and Hutchinson has demonstrated the levitation of objects weighing up to 60 lbs.
25. H-field—historically, the magnetic field. However, it is poorly named, and should be considered the magnetic excitation, after Sommerfeld. In empty space B and H are proportional, and experimentally determined fact. In the new approach, rigorously vector fields cannot exist in vacuum, but can only exist on an observable mass. A “shadow” vector field can exist in vacuum, in the absence of observable mass, as small virtual vectors, each existing on a virtual particle in the vacuum. Such a “shadow” vector field may be regarded as two coupled scalar fields, where the coupling is performed by the virtual particle flux of which the vacuum itself consists. When an observable, spinning charged mass encounters the shadow vector field, it converts the two coupled scalar fields into a vector field. Thus Hertz waves per se are not transmitted through vacuum; “shadow” Hertz waves are. With an ordinary detector, however, one detects vector Hertz waves, since one detects the precession waves of the electrons in the electron gas of the detecting probe or antenna.
26. Hyperfield—a structure or disturbance in hyperspace or higher dimensional space. With respect to a fixed frame, the electromagnetic field or a more subtle field, we consider the electromagnetic field the first hyperfield. A hyperfield may also be considered to be the electromagnetic field rotated further away from its laboratory frame. The second hyperfield is called the neutronic field, and the third hyperfield is the mental or mind field. Also called bioframe, orthoframe, hyperframe, biofield, or orthofield. These hyperfields/hyprspaces also



correspond to the vested levels of virtual state. Successively higher hyperfields past the electromagnetic field constitute successively lower levels of virtual state.

27. Hyperframe—simply, a frame rotated one or more right angle (orthogonal) turns away from the reference laboratory frame. The laboratory frame is considered to be the zeroth hyperframe. Also called bioframe, bioworld, biofield, orthoframe, orthoworld, orthofield, hyperfield, or hyperworld. Sometimes referred to as a hyperspace.
28. hyperspace—generically, refers to hyperframes, orthoworlds, etc. May be used in a singular sense to refer to one of these.
29. Kindling—collecting and condensing more subtle energies (an energy) into virtual photons (charge effects), photons (electromagnetic field effects), or matter (materialization effects). Coupling of longitudinal scalar waves (waves of pure massless charge/virtual flux intensity) into vector electromagnetic waves provides the specific mechanism for kindling.
30. Kirlian photography—field patterns of an object impressed upon a film or other sensitive material by means of spark discharges. The scalar modulations in the spark charge intensity, not the ordinary vector E-field components, are the paranormal components. Thus only the delta—which represents those scalar patterns coupling and kindling into vector EM, which then interacts in photochemical interactions—is indicative of the paranormal aspect of Kirlian photography.
31. Microcrystals—tiny crystals, particularly those used by George Yao in construction of his Pulsors<sup>®</sup>. Use of the microcrystals in proprietary manners enables Mr. Yao to build devices which react to scalar resonance and human intent, and which can generate negation patterns for potentially harmful “deltas” or changes that occur in the human etheric field (aura).
32. Neutrino—a neutral particle believed to have zero rest mass and travel at the speed of light. One type of neutrino is associated with the electron and one type with the muon. A third type is now believed to exist. There is some evidence recently of neutrinos possibly having a small mass, and of one type of neutrino turning into another type. In the new approach, the classical neutrino is a flux of much smaller particles—“bare” neutrinos—inside a photon. In the photon, one flux is taken to rotate clockwise and one flux to rotate counterclockwise (adapted from the phasor theory of Ruderfer). Further, a neutrino flux from one half of the photon to the other is hypothetically possible, and this flux would constitute a third type of neutrino. It would exhibit mass, and would allow one type of neutrino to turn into the other. The bare neutrino (from the new approach) is of magnitude  $1/c$  times the magnitude of the photon. Further, it moves at the speed  $c^2$ , but since it circulates at the speed of  $c$  at right angles to the motion of its photon carrier which is moving at the speed  $c$ , its detected velocity is always  $c$ , the speed of the carrier. To an observer in the hyperframe of the electromagnetic field a laboratory bare neutrino would appear as a photon.
33. Orgone energy—the subtle living or life energy discovered and utilized by Wilhelm Reich. Reich had discovered and utilized a portion of scalar electromagnetics (electrogravitation).

- 34. Orthogonal**—simply, at right angles. The intersection of two orthogonal geometric constructs, each of dimensions one or greater, is of one less dimension than the lowest dimensioned intersector.
- 35. Orthoframe**—a frame rotated away from the laboratory frame by one or more right angles. A hyperframe or bioframe. Also called an orthoworld.
- 36. Orthorotation**—rotation in hyperspace of an object, form, or particle at a right angle to its starting frame. The object loses one dimension in its intersection in the original frame and gains one dimension in its intersection in the frame toward which it rotates.
- 37. Photon**—the basic action quantum. It may be considered as an oscillation in time. It may also be considered as a virtual pattern of positron/electron pairs. A piece of electromagnetic radiation when it interacts as a particle. One half the photon exists in positive time (negative charge), and the other half exists in negative time (positive charge). The photon may be considered as two contrarotating neutrinos, after the work of Ruderfer. In the new approach, each of these rotating neutrinos is considered to be composed of vast numbers of circulating bare neutrinos. The photon may be considered as one cycle of an electromagnetic wave. The photon is the basic carrier of time and consists of a piece of energy welded to a piece of time, with no seam in the middle. The passage of “time” thus moves at the speed of light, its carrier. All ordinary photons possess the same action magnitude,  $h$ , although they do not carry the same energy. If the photon is made subquantal (i.e., less than  $h$  in magnitude), it is a virtual photon of the type whose emission and absorption cause charge on an electron. Virtual photons are not individually detectable, even in theory. However, a virtual photon may have positive mass under some circumstances.
- 38. Photon interaction**— the absorption and emission of photons by particles or objects. Usually the photon interacts with an orbital electron, being absorbed by the electron which is raised into an excited state. Then the electron decays from the excited state, emitting another photon. The macroscopic world is created by this interaction, which is the basic quantum change interaction. When we introduce additional photon interactions beyond the ambient background, the nucleus stays basically stable, and the normal first-order world we perceive seems quite stable. This is first level of physical reality, and it is the reality sensed by our coarse physical senses. However, scalar waves are emitted and absorbed by the nuclei of atoms, passing right through the electron shells without interaction. When we introduce additional scalar interactions beyond the ambient background, the nuclei change appreciably, and this level of physical reality may be far from stable. This is the higher reality, and it is sensed by the scalar electromagnetic functioning of our nervous system. Unfortunately, this system outputs only to the deep unconscious, since it is highly multi-ocular. Thus our conscious mind, being monocular, does not perceive the most fundamental reality in which we exist. Note that “time” is the special dimension in which multiple objects can exist simultaneously in the same interval, while space is composed of dimensions (lengths) in which multiple objects cannot exist simultaneously in the same interval. Time is multi-ocular, and space is monocular. Our conscious mind is fitted to the monocular photon interaction; being monocular, our conscious mind cannot be aware of time directly. For that reason we do not “see” time consciously. We do “see” it, however, unconsciously. The true

meaning of being “lost” is to be separated from the consciousness of the All, which is separation of our conscious, gross sensing of first order reality from our finer, more subtle, and infinitely richer—and unconscious—scalar sensing of ultimate reality.

39. Piezoelectric effect— in a material, the appearance of a voltage when mechanical stress is applied, or of a mechanical stress when a voltage is applied.
40. Potential—locked-in work or energy at a point. Ironically, in electromagnetics the electric (electrostatic) potential is completely misdefined. Most texts start about to define it in terms of “potential difference,” and then only tell how to prescribe the intensity or magnitude. For example: “The work which must be done against electric forces to bring a unit charge from a reference point (often at infinity) to the point in question.” Note this “definition” does not at all tell what a potential is, but instead tells how to mathematically determine its intensity. Briefly, electric potential is a locked-in stress in vacuum space-time. This stress at a point is due to the intensity of the virtual particle (virtual photon) flux at that point. The ambient local stress of vacuum is not zero, but is a very high value. Normally, we refer to “potentials” as measured from the ambient; that is, we actually specify the “difference from the ambient in spatiotemporal stress due to virtual photon flux” at the point in question. Any change in the ambient stress of vacuum is a curvature of space-time. The electrostatic curvature normally stress relieves almost immediately as electric force field. In Kaluza theory, the electromagnetic force fields are just the 5<sup>th</sup> dimensional aspect of the 5-d gravitational field. The 4-d gravity field is the other aspect of our 4-d world’s intersection with the 5-d G-field. Thus the electrostatic and magnetostatic potentials are simply two coupled aspects of the 5-d G-field. Normal electromagnetics is the “bleed-off” or escape of the 5-d gravitational field potential. If we wish to achieve a bleed-off into the 4-d G-field instead of the normal  $\vec{E}$  and  $\vec{B}$  fields, then we must “shut off” the EM bleed-off, which can easily be done by opposing EM fields so they vectorially sum to zero vector resultants. This creates artificial electrostatic and magnetostatic scalar potentials, which now are forced to bleed-off into the 4-d gravitational field at great amplification. Such an artificial potential produces a vector zero with a deterministic substructure, which polarizes the vacuum and engineers the virtual state.
41. **Psychic surgery**—paranormally opening and closing the flesh of the body to remove abnormal growths or tissues. In a less drastic case, operating on the etheric or subtle energy body, rather than the physical body. In legitimate psychic surgery, scalar interferometry from the surgeon can nullify the cohesive charges binding the tissue cells together in a line; the tissues then open without cellular damage. When the surgeon closes the tissues, scalar interferometry again restores the charge and cellular binding, so the wound is “healed” without scarring (or with little, in the practical case).
42. Psychokinesis—ceptive influence or effect upon a physical object, system, or situation by mental intent. Psychokinesis is accomplished by means of scalar anenergy wave patterns projected from the two cerebral halves in the fashion of a scalar interferometer. The waves interfere at a distance, microscopically in the object to be moved or affected, forming microscopic bursts of vector wave energy in the object itself. Jack Hauck has referred to psychokinetic bending of metal as “warm forming.”

43. Pulsor<sup>®</sup>. –scalar electromagnetic microcrystal device invented by the electrical engineer George Yao. Pulsors<sup>®</sup> are specifically designed to correct or smooth the patterns of the subtle scalar electromagnetic “bodies” or levels.
44. Quantum—a single “particle” of the quantit action. The quantum is always composed of two fundamental quantities (canonical variables), and it is the “fissioning” of the action quantum into two pieces which results in detection of one of the pieces. An indefinite “smear” of part of the two pieces may be simultaneously detected, but never both exactly (Heisenberg uncertainty principle). More recent work has shown that, in a highly nonlinear situation, both the canonical variables can be determined simultaneously to any desired degree of accuracy, in which case the Heisenberg uncertainty principle does not hold. This fundamental change in what has been regarded as one of the “sacred laws” of physics has not yet made it into most physics texts.
45. Scalar—in ordinary vector analysis, a quantity completely characterized by magnitude only. In the new approach, one must account for observable and virtual states. In addition, multiple vectors acting on one point and summing to zero are physically still present, even though the resultant vector is zero. Thus physically a zero vector can have a very real, distinct substructure of nonzero vectors. An observable scalar thus has a nested, multiple-level virtual substructure as well as any conglomerate “observable vector” substructure. Note that the substructure contributes to the stress of the object or medium, even though it constitutes a zero vector in its envelope. Each level of this substructure contains an infinite number of tiny virtual vectors. Two scalars that are observably equal need not be equal at all in their substructures. Further, combining the two scalars by superposition may not yield the normal observable value, if both substructures are highly patterned and interact to spill over into the observable level. Vector mathematics itself must be changed and extended in the new approach. Note that the spillover from interaction of the two substructures may form an observable scalar value or an observable vector value.
46. Scalar energy tap—refers to a Soviet method of obtaining tremendous electromagnetic energy from the molten core of the earth, with which to power gigantic strategic scalar howitzers. As measured by Golden, two scalar signals are continually transmitted into the earth some 12 kilohertz apart, and the earth itself is placed in scalar resonance to the two frequencies. At the transmitters, by negative biasing, one then has a kind of scalar interferometer channel in the earth in the endothermic mode. Ordinary EM energy is captured in the 12-kilohertz band by scalar interferometer receivers. Varying the negative biasing provides a throttle to confront the amount of energy extracted and appearing in the 12-kilohertz receiver interferometers. Just before May 1, 1985 celebration, the Soviets activated some 27 such giant energy taps in the earth, and also activated a large number of command and control scalar transmission frequencies. If each tap can power 6 to 8 giant Tesla howitzers, then for their important 40<sup>th</sup> anniversary of 1945 the Soviet Union activated well over 100 large howitzers. In other words, a massive exercise of the Soviet Union’s entire strategic scalar howitzer weapon complex was held on the 40<sup>th</sup> anniversary of 1945. At the conclusion of the exercise (which lasted several days), the Soviets left two scalar energy taps in place.

47. Scalar field—in vector analysis, each point in space is assigned a magnitude; the set of spatial points and their assigned magnitudes is called a scalar field. In the new approach, an observable scalar value is assigned to every point in n-dimensional space, where n is 4 or greater, and the set of n-dimensional points and their assigned observable magnitudes is called a scalar field. Also, in the new approach each scalar magnitude is considered to contain an n-dimensional virtual-state substructure, where each succeeding higher dimension is a succeeding lower level of virtual state. Vacuum itself is such a scalar field. Such a scalar field is also the rigorous identity of a massless charge field, of—for example—the electrostatic scalar potential,  $O$ .
48. Scalar interferometry—the interference of two scalar Tesla waves. In the interference, coupling can occur and produce (or extract) electromagnetic waves—energy at a distance. This is the secret of Tesla’s revolutionary discovery—and of wireless transmission without loss. It is also the secret of death rays; the invulnerable Tesla domed shield; antigravity; supraliminal communication; controlled materialization, dematerialization, and transmutation; psychokinesis; and free energy. The ubiquitous photon interaction presently is the basis for first-order physical reality, and the photon’s speed results in a speed-of-light-limited reality being detected. Scalar EM waves do not necessarily have this speed limitation, and detection by scalar waves yields a higher order reality and vastly expanded relativity theory. Present Einstein relativity theory is only a highly special case. Soviet use of scalar interferometers in large, strategic mode is responsible for much of the advanced Soviet ABM defense and strategic super weaponry.
49. Scalar resonance—inertial or mass resonance of a body, originally discovered by Tesla, repeated (probably) by Hooper, and rediscovered by Golden. In the simplest case, scalar resonance can be imagined as two ordinary single-frequency EM standing waves in a resonant cavity, with the two waves coupled exactly 180 degrees out of phase so that – externally—their E fields sum to zero and their B fields sum to zero. This is a standing scalar wave, and the cavity is said to be in scalar resonance. Mass itself is simply such a standing scalar resonance, with the standing wave trapped by particle spin. Essentially all frequencies can be present at once, but certain nuclear resonance frequencies are thought to predominate. By increasing the amplitude of a standing scalar wave, inertia and mass of an object are increased. By decreasing the amplitude, the mass and inertia are decreased. Zeroing the amplitude dematerializes the particle. Scalar resonance is not presently contained in the orthodox physics literature.
50. Scalar wave—a longitudinal “pressure” wave in the actual stress of space-time itself. A Tesla wave. A gravitational wave. A time wave. Electromagnetically, a scalar potential wave, which, in the absence of spinning charged mass particles, does not form a vector electromagnetic wave, in contradistinction to present electromagnetic theory. A “shadow vector” wave where the ordinary “observable force vector” of the field is broken into virtual vector components which are not integrated. A wave in the nested levels of virtual state, that does not breach the quantum threshold, and hence is not observable to normal detectors. A longitudinal wave in pure massless charge flux (vacuum) space-time). The scalar wave is free to move in four or more dimensions. In Minkowski 4-space, it can: (1) move only in time, and not spatially, in which case it “sits in one place” and fluctuates the flow of time, the inertia of an object, the strength of the gravitational field, the mind, the fundamental

constants of nature, etc.; (2) move only spatially, with the rate of flow of time oscillating about a linear mean; (3) move in a mixture of modes (1) and (2); (4) oscillate back and forth between modes (1) and (2) in a regular fashion, spatially stationary; and (5) oscillate back and forth between modes (1) and (2), translating spatially in traveling wave fashion. An ordinary Hertzian wave exists in vacuum as two coupled Tesla longitudinal waves; rigorously, the  $\vec{E}$  and  $\vec{B}$  fields do not exist in vacuum, but on and of the detecting spinning charged particle. The spin of the detecting particle causes precession, yielding the familiar “transverse Hertzian wave,” complete with  $\vec{E}$  and  $\vec{B}$  fields. The broken but ordered virtual state bits of what will be the detected  $\vec{E}$  and  $\vec{B}$ , however—shadow vectors  $\vec{E}$  and  $\vec{B}$ —exist in vacuum, on the virtual components of the vacuum charge flux. Tesla was correct when he stated that transverse Hertz waves (as such) could not move through the vacuum.

**51.** Shadow vector—an otherwise observable vector, broken into consecutive bits such that each bit is virtual. The resulting “broken vector” becomes unobservable as a vector, but remains as an ordered series of virtual vectors. Thus it is a special sort of scalar wave. Observably, it is a scalar wave since no observable vector exists, but virtually it is a vector wave. It may be regarded as a localized, changing scalar field with a particular patterned virtual substructure, which yields the shadow vector. On an appropriate integrating detector, the virtual components of the shadow vector will be reintegrated into an observable force vector, such as  $E$  and  $B$ . Dr. Robert Beck, for example, has reported the development of a successful integrating detector for such shadow vector scalar waves. His detector is capable of detecting signals that cannot be seen by the finest Superconducting Quantum Interference Device (SQID). Dea, Bedini, Dayney, Golden, Beck, Bielek and Bise have independently built scalar wave detectors of various kinds.

**52.** Space—literally, the absence of observable mass, hence emptiness or void observably. Space per se has no definite length interval and no definite time interval. Rigorously, space is the absence of distinction and separation. Space has no dimensionality—i.e., it is not 3-dimensional, 4-dimensional, etc., for it has no “specific” separation. But in common usage, it is often thought of in a general sense as having some particular dimensionality but no definite intervals. The point is subtle but important: the absence of a 3-dimensional mass need not be 3-dimensional (e.g., considering a 10-dimensional frame). But one usually thinks of the “hole” where the mass was as having the same dimensionality as did the absented mass. This is only a 3-dimensional intersection of the actual hole, however, though this point is usually ignored. Ignoring the full dimensionality of a hole is responsible for the confusion regarding the two-slit experiment in quantum physics, for example. That is, the slits are (at least) 4-dimensional, since they exist in time also. In the slits, spatial mass is absent, so the slits are 3-dimensional “holes.” However, their 4-dimensional aspect, time is present, not absent. Thus 4-dimensionally the 3-dimensional slit “holes” are not “holes,” but are “things.” They are not 4-dimensional absences, but presences—since one dimension (time) is still present. They can thus interact in the fourth dimension, time. The experiment has no mystery when the time aspects are considered, as pointed out by Charles Muses in 1957. Also, in space-time—rigorously—all 3-dimensional material objects, holes, gaps, etc. are simply facets or intersections of a single object. For if time is considered as a continuum, then everything exists at once; hence spatial things are simply the features of a single 4-dimensional object. The problem is that “space” is also commonly taken to be a “spatial frame,” where time has

been stripped off and “stopped,” and a measurement to each and every point in the universe frame has been simultaneously established. This usage of “space” implies “spatial frame.”

- 53.** Spin—the intrinsic angular momentum of a particle, as if it were a top spinning about an axis. Spin is quantized. Spinning charged particles—such as an electron—thus demonstrate a magnetic moment, due to the circulation of charge in the spinning. In the nucleus of an atom, the spin of the nucleus is the resultant of the spins of the nucleons (particles comprising the nucleus).
- 54.** Time—in relativity, an extra dimension (variable) which allows the ordering of spatial snapshots or events. In quantum mechanics, time is only a parameter; it is not an observable and is not detectable, even in theory. Time is always inferred, even though precisely. Rigorously, time exists only through the stream and persistence of human consciousness. We only experience that persistence as “something changing” by continual comparison of our memory of perceptions of spatial position and pattern. In the abstract sense, time is being which has no differentiation whatsoever—it simply is. Perceptual separations in being constitute thoughts or mind changes, much like waves in water. Those waves common to all minds constitute physical (spatial) changes in the so-called “real” world. Because “time” in its undifferentiated sense is simply a synonym for being, then multiple things (separations) may inclusively exist in time simultaneously. (How many final objects exist in a stone before it is carved into any one of them?) The basic separator of being/time is the photon interaction, which is the basic generator of monocular quantum change and thus the progression of spatial particles “through time” in little jumps. The endpoints of the quantum jumps through time represent time differentiations of space-time/mass-time.
- 55.** Vacuum—pure virtual particle, massless charge flux. The ether (nonmaterial, Lorentzian). Lengthless, timeless space-time itself. Note that vacuum is not an emptiness FILLED with massless charge, rather, it IS identically massless charge. It is a plenum, not an emptiness. It is also pure action, undifferentiated. Einstein once suggested that the vacuum, complete with its electromagnetic and gravitational fields, should be taken as the ether. In the modern view, the term ether is again accepted in the literature, but now it refers to a “virtual particle” ether, not a thin material ether.
- 56.** Vector—in mathematics, an entity completely characterized by a magnitude and a direction. Abstractly, vectors are considered to be formed by a difference in potential between two spatial points. In the new approach, vectors are characteristics of particle motion, and do not observably exist in the absence of a particle. Since all detectors have mass, and this mass contains spinning charged particles, then force vectors are constituted on and of the spinning charged particles.
- 57.** Vector field—in ordinary theory, the assigning of a magnitude and a direction (that is, a vector) to each point in space. The entire set of vectors and their spatial points are called a vector field. In the new approach, such a vector field cannot observably exist in a vacuum; each of its vectors exists in broken virtual bits, ordered in line to form the bits of the observable vector but not joined. In the presence of a detecting/integrating mass, such as a spinning charge electron, the virtual bits and the spinning charged mass couple into a system that identically comprises the observable vector.

- 58.** Virtual (state)—that part of physical reality consisting of changes (particles, waves, and other entities) smaller than the least detectable (quantum) change. A thought or thought form is also virtual. May be visualized as consisting of real, dynamic “pieces of vacuum” or “pieces of nothing”—that is, quipons. Every ordinary observable particle (photon, neutron, electron, photon, etc.) contains or consists of a dynamically changing cloud of virtual objects. Exchange of virtual objects is thought to generate almost all forces of nature. Conservation of energy need not be conserved in virtual interactions, and generally is not. In the new approach, the mind may be considered a special virtual universe, and a thought a virtual object. Virtual state consists of multiply nested levels, each level progressively finer and more subtle. These sublevels also correspond mathematically to higher geometrical dimensions. Charge on a mass is also due to its continual emission and absorption of virtual particles. Waves in the virtual state massless charge flux, which do not breach the quantum level to become observable, are vectorially nonobservable yet real—these are scalar waves, or shadow vector waves, and are longitudinal—that is, they are oscillations of the stress energy tensor of vacuum.
- 59.** George Yao—engineer and inventor of the Pulsor<sup>®</sup>, which affects the subtle scalar levels of the human body’s aura or scalar radiation pattern.
- 60.** Yeti—the Eastern—particularly Tibet, Nepal, etc.—Himalayan version of the ape-man tulpoid, corresponding to the U.S. Sasquatch or bigfoot.
- 61.** Zarg—the collective human unconscious, considered as a mind and a living entity. It is at least 5-billion dimensional, since it may be considered to be composed of the unconscious minds of all individual humans.
- 62.** Zero—naught or nothing; the absence of thing. A naïve definition is the absence of number. However, if all the nonzero numbers are considered to represent the presence of number, then to declare zero a number—that is, the presence of a number—is a self-contradiction since it has just been declared the absence of number. In the numerical senses, one may do a little better by calling zero “the absence of any and all numbers except itself.” Yet in this case, difficulties arise as to how one is to justify the addition of any other number to zero: how can a number be present with the absencing operator, so as to be added? The absence of any type of thing observable. Formally, the additive identity element of an algebraic system. That is, formally, the basic idea of zero is that, added to a number, the result is still identical to that number. Implicit in this formal definition is a “single level” of perceived objects; that is, there are no “hidden objects” in a separate level of sets. If multiple levels of perception are allowed, then the zero becomes much more complex. That is, it represents the absence of all other numbers at that particular level, and of that level’s kind. In that case, it may contain any combination of objects from another level, yet be perceived as containing “nothing of its own assigned level.” In that case, there exist an infinity of different “kinds” of zeros, if the hidden associated structure (the substructure) is taken into account. Unfortunately physics has created such multiple levels, but has not required its mathematics to clearly specify the changed nature of the zero. As an example, at the observable level, an infinite number of kinds of zeros exist, when the virtual level and pattern associated with the zero are taken into account. This characteristic of physics actually violates the following zero axiom; an observable  $v$  plus an observable zero is considered to be equal to an observable zero plus  $v$ .



In fact, the sum of  $v$  and a particular zero may not be equal at all to the sum of another zero and  $v$ , if the virtual patterns of the two zeros differ.

- 63.** Zero point energy—the kinetic energy that remains in a substance when its temperature is absolute zero. Quantum mechanics requires a simple harmonic oscillator to still possess kinetic energy at its lowest state: that is, it possesses half a quantum of energy. In solid materials it is distributed throughout the lattices vibrations, contributing to the binding energy. Vacuum also has zero point energy.
- 64.** Zero-point energy of vacuum—the vacuum is increasingly being regarded as composed of an incredibly dense structure of virtual electromagnetic energy, even at zero degrees absolute. From quantum geometrodynamics, as one approaches the Planck length—say,  $10$  to the minus  $35^{\text{th}}$  meters—these oscillations become so energetic that the fabric of space-time itself is torn, resulting in sporadic, continual connection and disconnection of widely separated portions of space-time. This “quantum foam” was dubbed “super-space” by J. A. Wheeler. Actually, if space and time are torn, then energy itself—and vector waves—are also torn. That is, the super-space consists of pure massless charge flux, pure scalar waves. If compacted to energy and then mass, this anenergy density of vacuum may be approximated as  $10$  to the  $100^{\text{th}}$  grams per cubic centimeter, where it compacted into mass. The actual electrical charge of the vacuum appears to be about  $200,000,000$  volts, if it were possible to measure a voltage drop from it to an uncharged region.

Thus it is space (actually space-time) that is incredibly dense, and matter that is ethereally thin. Space-time goes through matter, rather than matter through space-time. This anenergy of vacuum does interact with electromagnetic fields and matter to give observable effects, as evidenced by the Lamb shift, for example. The Lamb shift proves that the vacuum charge or anenergy can be “tapped.” Tapping the “vacuum energy” would immediately end the energy crisis forever. Further, it can be done with practical devices, as T. Henry Moray showed in the 20’s and 30’s.

- 65.** Zero vector—a vector having no length (no magnitude) or specific direction. Absence of any or all finite vectors. Resultant of a system of multiple, finite vectors whose vector sum has no specific direction. Note that the second definition differs from the first. That is, we cannot say that a vector resultant zero has no magnitude, if we consider the components, all of whom have magnitude. See the discussion under “zero.” In vector analysis, the zero vector axiom is that any vector  $v$  plus a zero vector is equal to a zero vector plus  $v$ . However, there are an infinite number of different zero vector resultant systems, and so zero vectors may differ, if their “substructure” is considered. Indeed, a zero vector system must be identified as a special form of potential, if its substructure is considered. The common practice in physics of replacing a zero-summed system of vectors with a vector zero is incomplete; it should be replaced with a special vector zero and a scalar potential. By failing to do this, physics excludes the ability to engineer space-time, the virtual state, local general relativity, and the probabilities of the states propagated by the Schrodinger equation. It also excludes scalar electromagnetics (electro-gravitational), and unification of all forces in an engineering electromagnetics fashion. In the new view, a zero vector may be a system of vectors that vectorially sum to zero, but the components may still exist “inside” the zero-resultant envelope. This substructure can act on nonlinear or resonant systems. Any or all components may be time varying, or none of them may be. In addition, such a vector zero system is

considered to be also a scalar stress potential, whose magnitude is equal to the sum of the absolute values of the perpendicular components. In addition, a separate type of stress potential may be included for the magnitude of the absolute values of the swirl components (torques). Other associated potentials may be include for the system, particularly if the system is in multiple dimensions, if it consists of more than one type of virtual particle flux, if several fluxes intercommute, etc.

## LT. COL. THOMAS E. BEARDEN

Lt. Colonel (Retired) Thomas E. Bearden is a nuclear engineer, war games and weapons analyst, and military tactician. He has obtained a Master of Science degree in nuclear engineering from the Georgia Institute of Technology and a Bachelor of Science degree in mathematics from Northeast Louisiana University. He is a graduate of the U. S. Army Command and General Staff College and several U.S. Army artillery and guided missile schools.

Lt. Colonel Bearden has over twenty-nine years experience in air defense systems, tactics, and operations; technical intelligence; command and control expert systems (artificial intelligence) applications, nuclear weapons employment; computerized war games; antiradiation missile countermeasures; and military systems requirements. He has personally developed and published the basis for a drastic extension of electromagnetics, which is now receiving Department of Defense attention for possible newly directed energy mechanisms. If verified by experiment, the new electromagnetics offers the first breakthrough in direct engineering of gravitational waves, fields, and forces.

He is presently a senior scientist with the Alabama division of a large aerospace company where he is involved in design and production of an expert system (artificial intelligence) application to manage the identification function for the divisional air defense battalion. He previously completed design and production of a prototype expert system for management of critical ammunition resupply and missile exhaustion by forward air defense units.

He is a member of Mensa, Society for the Investigation of the Unexplained, International Tesla Society, American Association for the Advancement of Science, Association of American Physics Teachers, Association of the Air Force, and Association of the U.S. Army. He is on the board of Governors of Interdimensional Sciences Corporation and the American Association of Gravity Field Energy. He previously was on the Board of Directors of the U.S. Psychotronics Association, the American Association of Meta-Science, and ASTRON. He is the Alabama Director for the Association of Distinguished American Scientist and is a member of the American Nuclear Society.

Mr. Bearden is the former editor of *Specula*, Journal of the American Association of Meta-Science and served as a MUFON Advisor on nuclear engineering. He has contributed articles to professional publications. He has written many books and produced videotapes, numerous papers, briefings, and presentations dealing with unusual phenomena, scalar electromagnetics (electrogravitation), psychotronics, Soviet Tesla weapons, and Soviet scalar electromagnetic weather warfare. He has been active as a theorist on UFOs, parapsychological and paranormal phenomena, Tesla electromagnetics and electrogravitation, and psychotronics.

# LABORATORY REPORT

Client	Razorback Limite	Sample	Pulsor® Devices	Lot Number
Test and Reference		ABSL Number		Page
Radiation Effects Determination		14978		4 of 5
Date Received	11/26/79	Date Initiated	12/19/79	Date Completed
				2/7/80

## BLOOD CHEMISTRIES RESULTS

Test	Group A Control	Group B Fluorescent Light	Group C Fluorescent Light Plus Pulsor® Device	Units
Calcium	10.30	10.1	9.13	mg/dl
Phosphorous	7.36	8.36	7.62	mg/dl
BUN	19.6	20.2	17.75	mg/dl
Creatinine	1.04	1.0	0.96	mg/dl
BUN/Creat. Ratio	18.87	20.29	18.69	-----
Uric Acid	3.86	3.6	6.56	mg/dl
Glucose (CS)	277.4	225.6	283.5	mg/dl
Total Protein	5.94	6.32	6.08	gm/dl
Albumin	2.64	3.0	2.72	gm/dl
Globulin	3.30	3.32	3.27	gm/dl
ALB/Glob. Ratio	0.80	0.90	0.84	-----
Total Bilirubin	0.154	0.158	0.206	mg/dl
Direct Bilirubin	0.04	0.04	0.04	mg/dl
Transaminase, SGO	189.4	162.2	212.6	IU/L
Transaminase, SGP	64.0	81.66	42.6	IU/L
Alk. Phosphatase	36.0	52.7	36.2	IU/L
Cholesterol	72.2	74.2	70.0	mg/dl
Iron	146.5	202.3	295.0	mcg/dl
Magnesium	2.45	2.46	2.47	meq/l
Sodium	145.8	147.4	146.0	mmol/l
Potassium	5.94	6.30	6.28	mmol/l
Chloride	102.0	103.6	105.6	mmol/l
G Glutamyl Transpep.	2.75	1.0	1.25	units/l
Triglycerides	144.2	143.6	136.2	mg/dl
LDH Serum	834.8	638.6	696.5	Units

APPLIED BIOLOGICAL SCIENCES LABORATORY, INC.  
 6320 SAN FERNANCO ROAD, GLENDALE, CALIFORNIA 91201  
 (213) 242-6944 (213) 245-1318

All reports are submitted as the confidential property of clients, authorization for publication of our reports, conclusion or extracts from or regarding them is reserved pending our written approval as a mutual protection to clients, the public and ourselves.

## EPILOGUE

# Hyperspace Engineering An Interdimensional Exchange of Energies

The state of energy existing in the fourth dimension—the virtual state—can be teleported to the three-dimensional world of time and space. In the hyperspace there is no time and space. All actions and activities are instantaneous.

Basically, to understand the nature of energy systems is to unravel the truth about all. It is a process of filtering off the unwanted and short-lived temporary energies and developing the positive and permanent faculties.

At the zero-point energy plane, nature has three characteristic parameters: the acceptor; the donor; and crystallization. When nature comes into contact with the primal energy, the audible life stream, or the vibratory sound current, it creates and sustains all things in the universe and beyond.

Nature + Sound current—Creation begins—flows to Acceptor—activates Donor—enters and forms at the same time the positive pole of the quasi-crystalline structure—and exits as the negative pole of the structure, thus creating a zero-point energy plane crystallization. Add time to the above creation in hyperspace, and we create form or solid crystals.

At the attainment of a perfect cube, resonance begins to create a secondary holographic reproduction of the first focal point of energy. The biogravity field of the zero-point energy plane manifesting in the three-dimensional or mental plane consists of all subatomic particles dancing to the tune of rhythmic resonance of the cube. Out of this dance of confusion, heavier bodies or energy points, like atoms and electrons, emerge and become entrained in a swirling vortex force field. Thus they become oriented, and function in an orderly manner, which obeys the natural laws of three-dimensional science.

When the sound current comes into contact with Nature's focal point or Black Hole, the acceptor, donor, and critical resonance center all try to dominate the other. They cannot separate as they are all latched into the system. When the acceptor dominates the system, cosmic knowledge comes forth. The transformation of the biogravity field is like pressing oil out of a seed. Out of this cosmic knowledge, and through a loss of energy and attenuation, this center drops one level lower and forms ego—a boxed-in biogravity field from which the mind is born.

Mind is the five-sense organ. The human body is just solid-state matter among other solid-state matter, made of gross and solid elements manifesting from the ego-biogravity center. The body is special instrument for the enjoyment of other objects. It is a privileged, temporarily leased vehicle for our comfort and use. We do not own this body; it does not belong to us. Therefore, anything we enjoy here, we must enjoy with a sense of detachment and the understanding that a thing's value is regulated by one's desire for it.

If one wants to know the real knowledge, one must give up one's desire for it; then it will be seen at once that all knowledge becomes an open book. One should not be without knowledge, but one should nevertheless be freed from knowledge. When we stop trying to understand at the level of the mind, we are automatically thrust into the hyperspace, where the glory and treasures of nature dwell. We begin to understand everything at an instant, without having to think or reason. This is understanding by direct perception.

May this work on Pulsor<sup>®</sup> Microcrystals bring you the miracle of understanding without thinking and that you may one day tune in to the Hyperspace any time at will. Above all, may you have the good fortune of coming in contact with a real living Master of the Audible Life Stream—The Primal Energy in action.