

White Paper XXI

Psychoenergetic Science Applied to The Mind-Body Concept

by

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[September 2010]

Introduction

This author tends to think of nature as radiating to all humanity on many different bands of information and energy. Over the past four hundred years, orthodox science has learned a great deal about one of these bands, the electromagnetic (EM) band, and almost nothing about any of the other bands. We are a slowly evolving species and we need to develop a science that encompasses all of these bands of informational radiations. To clearly discriminate such a future science from today's orthodox science, which has many, many EM parts, let us use a metaphor and call it "*the ladder of understanding*" and illustrate it via Figure 1. Today's orthodox science, as wonderful as it is, is all contained within the bottom rung of this Ladder of Understanding.



Figure 1. A metaphorical description of *"the Ladder of Understanding"*.

As we reflect upon our world and upon the humankind that populates its surface, one soon perceives that there are several categories of phenomena and information wherein we need to gain understanding in order to enhance our life's journey. These natural phenomena might be classified as (1) all things of the physical, (2) things of the psyche, (3) things of the emotion, (4) things of the mind and (5) things of the spirit. In addition, we also need to eventually create a meaningful perspective or quantitative reference frame (RF) from which to view these different classes of phenomena and information. Ultimately, our understanding of all this information must be internally self-consistent relative to some overarching RF.

Since we are an evolving species, growing in understanding via a bootstrap process, we must build this ladder of understanding, step by step, by our individual and collective efforts and climb upon it, rung by rung, as we slowly evolve to higher states of beingness!

From an overly simplistic view, one might say that, for the past 400 years, orthodox science has dealt with multiple aspects of the metaphorical reaction equation

$$\text{MASS} \rightleftharpoons \text{ENERGY} \quad (1)$$

with each term being convertible to the other via Einstein's $E=mc^2$ relationship. Here, m =mass, c =velocity of EM light through physical vacuum and E =energy.

Over this 400 year time period, orthodox science has also come to accept the existence of (1) the four fundamental forces of gravity, electromagnetism, the short range nuclear force and the long range nuclear force, (2) quantum mechanics (QM) with Planck's discrete energy changes rather than continuous steps in energy exchanges between different atomic energy levels and De Broglie's concept of simultaneous particle and wave behaviors for electric charge-based matter, plus (3) relativity theory's (RT) predictions that both mass, m , and energy, E , must increase to infinite values as velocity, v , changes

from $v \ll c$ to $v = c$, (4) the reference frame (RF) for studying nature is a distance-time-only RF and (5) the unstated assumption of orthodox science since the days of Descartes is that ***“no human qualities of consciousness, intention, emotion, mind or spirit can significantly influence a well-designed target experiment in physical reality”***.

All of this great work has created the substantiality of the bottom-most rung in Figure 1. However, it is very important to recognize that orthodox science strives to find internal self-consistency with respect to all experimental data discovered in nature relative to its operational RF of distance-time. Anything else, if there is such, must be rejected. **Unfortunately**, for today's orthodox science, natural phenomena like consciousness, intention, emotion, mind, spirit, love, psychophysiology, parapsychology, etc, are real but are **not** distance-dependent functions. Thus QM and RT, in their present form, can say nothing meaningful about this class of phenomena. This fact signals the ultimate demise of today's orthodox science and orthodox medicine as absolute guiding principles in the future evolution of our species.

Expanding the Picture Frame

The title of this paper **requires** that the natural qualities of consciousness, intention, emotion, mind, spirit, etc, somehow become operational factors in our future science and future medicine. In parallel with my former orthodox science studies at Stanford University, this author has worked towards this goal for the past 40 years. Both experimentally and theoretically. This work has culminated in clearly distinguishing what we have labeled **psychoenergetic science** from today's orthodox science. This is a science that includes human consciousness in the form of **specific intentions** as a significant experimental variable in the study of nature. Thus, it is a simple but profound expansion of both (1) the parameters of today's orthodox science and (2) the larger reference frame needed for studying substantially more of nature's manifold expressions.

To significantly test the unstated assumption of today's orthodox science, four well-designed target experiments were created and run to see if that assumption was viable in today's world. The results are in and were robustly successful in proving that this **unstated assumption of orthodox science, since the days of Descartes, is in grievous error** in today's world!

The four target experiments, that will ultimately change our present world view, are the intention experiments conducted by this author and his colleagues over the past 13 years. These robustly successful experiments, once and for all, transformed the metaphorical Equation 1 to its psychoenergetic counterpart given here by Equation 2

$$\text{MASS} \rightleftharpoons \text{ENERGY} \rightleftharpoons \text{INFORMATION} \rightleftharpoons \text{CONSCIOUSNESS}. \quad (2)$$

With this important step, humankind makes the irrevocable move from strict adherence to the first rung of Figure 1 to a **toehold** on the **second rung** of our Ladder of Understanding!

In Equation 2, although we probably do not all agree on the same definition for the word consciousness, we would all probably agree that consciousness manipulates information in the form of numbers, words, symbols, etc. Fortunately, for the past 60-70 years⁽¹⁾, we have known that any process in nature that **increases** the information content, ΔI , of the universe automatically **decreases** the thermodynamic entropy, ΔS , by an equal amount, i.e.,

$$\Delta S = -\Delta I. \quad (3a)$$

Further, since both entropy change and energy change are both portions of the Gibbs or Helmholtz thermodynamic free energy function change, ΔG , in nature⁽²⁾, while positive ΔG drives all the processes in nature that we know of, the connectivity of Equations 2 and 3a are completely lawful because, at constant temperature,

$$\Delta G = \Delta(pv) + \Delta E - T\Delta S = \Delta(pv) + \Delta E - T(S_o - \Delta I). \quad (3b)$$

Equations 2 and 3 form the theoretical cornerstone of psychoenergetic science⁽³⁾.

The Four Target Experiments

The key experimental step needed to confirm the operational nature of psychoenergetic science was to unequivocally prove, via a series of human intention experiments, that in today's world **the unstated assumption** of orthodox science is **quite wrong!**

Our various steps in the four groundbreaking experiments were (a) to carefully design four different intention experiments:⁽⁴⁾

- (1) To **increase** the acid/alkaline balance (pH) of a specific type of water by $\Delta pH = +1.0$ pH units (a factor of 10 decrease in hydrogen ion, H^+ , content of the water) with **no** chemical additions to the system,
- (2) to **decrease** the pH of this same type of water by $\Delta pH = -1.0$ pH units with **no** chemical additions to the system,
- (3) to **increase** the in-vitro thermodynamic activity of a specific liver enzyme, alkaline phosphatase (ALP), by a significant amount (~30% for example) by simply exposing a vial of this ALP to a highly "intention-conditioned" experimental space for about 30 minutes and
- (4) to **increase** the in-vivo ratio of ATP/ADP in the cells of fruit fly larvae by a significant amount as a result of lifetime exposure of the larvae to a highly "intention-conditioned" experimental space.

This should cause the larvae to become more physically fit and thus significantly lower the larval development time, τ , to the adult fly stage;

(b) run continuous background studies of each experiment in a **normal**, non-intention-conditioned experimental space,

(c) design and utilize four identical simple electrical devices⁽⁵⁾, each to serve as a host for one of the four experiments,

(d) design an experimental protocol for humans to mentally/emotionally imprint an intention into each such host device from a deep meditative state⁽⁵⁾ and

(e) place the appropriate device within ~ 0.5 meters of the operating experimental apparatus, plug the device into an electrical outlet, switch it on (total electric power radiated was less than one microwatt) to continuously run in that experimental space and wait for changes to manifest in the continuous data-stream.

For all four experiments, the gathered data conformed to the general pattern of Figure 2⁽⁶⁾.

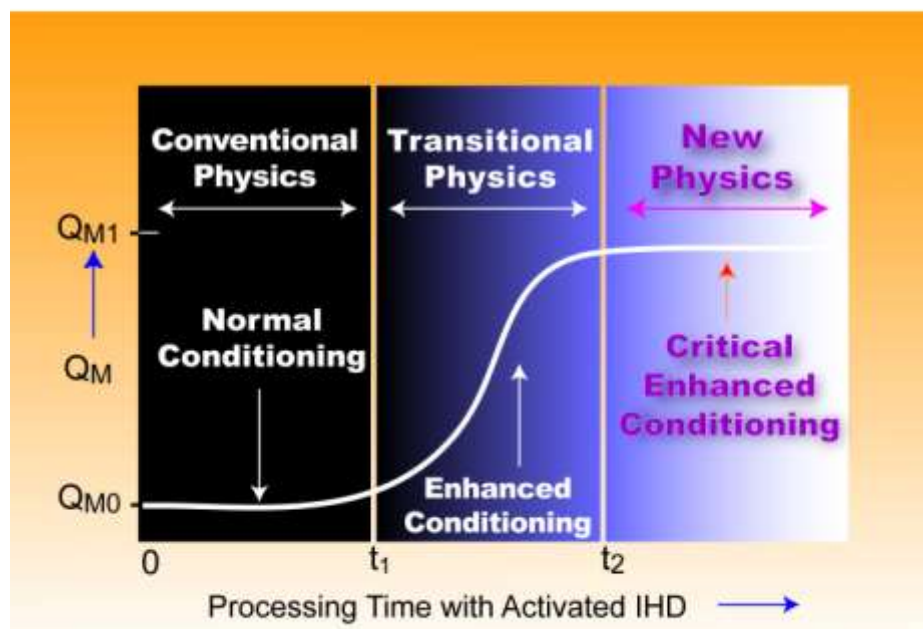


Figure 2. For any typical physical measurement, Q , the qualitative magnitude change, Q_M , is plotted versus the degree of locale conditioning produced by continued IHD use.

Here, Q_M is the magnitude of the measured property under investigation as a function of experimental space processing time, t , via the intention-host device (IHD). Q_{M0} is our background value for a normal space while Q_{M1} is the measured value after the device had intention-conditioned the space to a significantly higher level of physical reality. Non-linear changes in Q_M begin to appear at $t_1 \sim 1$ month⁽⁶⁾,

and always in the direction of the specific intention in the IHD, while it begins to plateau at $t_2 \sim 2$ to 3 months. Generally, $Q_{M1} \sim Q_{M0} +$ the intention imprint target goal. Experimentally, we found that for target experiment #1, $\Delta pH = Q_{M1} - Q_{M0} \sim +1.0$ pH units; #2, $\Delta pH \sim -1.0$ pH units; #3, Δ chemical activity $\sim 30\%$ with $p < 0.001$ and #4, $\Delta(ATP/ADP) \sim +15\%$ with $p < 0.001$ and $\Delta\tau \sim -25\%$ with $p < 0.001$ ⁽⁴⁾.

Two Key Experimental Characteristics of an IHD-Conditioned Space

A. A DC magnetic field effect: Subsequent experimental studies showed that, when Q_M in Figure 2 had plateaued, measuring pH in the presence of a DC magnetic field as in Figure 3a, shows a strongly increasing pH (more alkaline) when the south pole points upwards into the measuring vessel of water and a decreasing pH (more acidic) when the north pole points upwards into the water as shown in Figure 3b⁽⁷⁾.

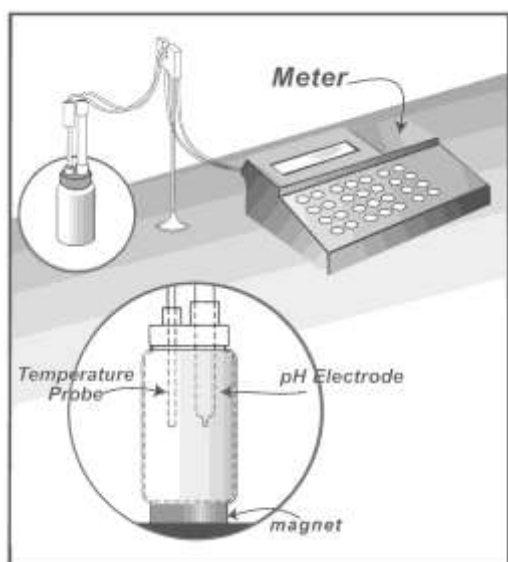


Figure 3a. Experimental set-up for testing changes due to a DC magnet placed under the water vessel with either the N-pole or S-pole axially and vertically aligned and pointing into the water.

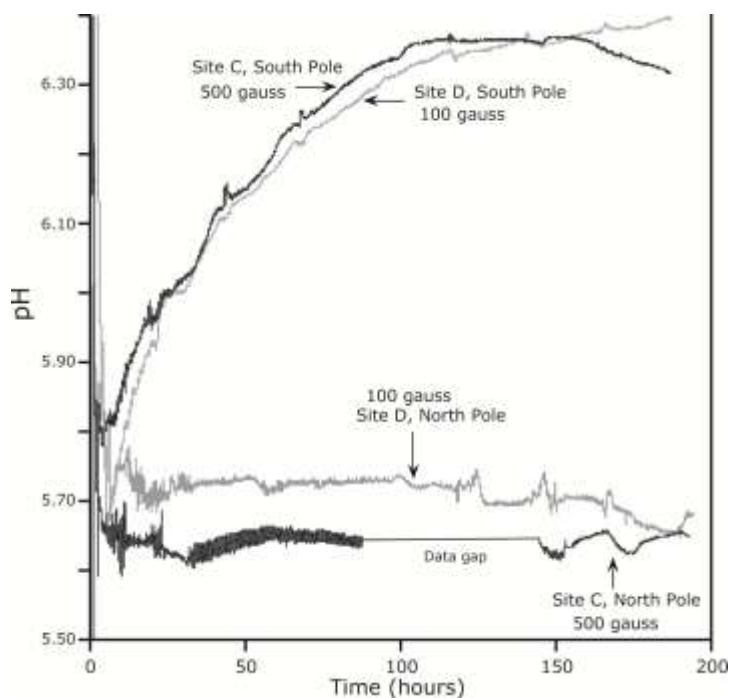


Figure 3b. pH changes with time for pure water for both N-pole up and S-pole up axially aligned DC magnetic fields at 100 and 500 gauss for an IHD-conditioned space.

This behavior **does not** occur when $Q_M \sim Q_{M0}$ and our normal physical reality obtains. The reason for this result is very straightforward and is the expected result when only magnetic dipoles and electric charges are present (as in our normal physical reality, the U(1) EM Gauge symmetry state⁽⁸⁾). This is because both the magnetic force and the magnetic energy contribution for a single magnetic dipole is proportional to H^2 (the magnetic field strength is H) and is independent of orientation in space.

The presence of the Figure 3b result is thus strikingly anomalous with respect to the U(1) EM Gauge symmetry state but not with respect to an SU(2) EM Gauge symmetry state⁽⁸⁾ where both electric charges **and** magnetic charges simultaneously coexist and can interact with each other. Thus, the presence of the Figure 3b result being associated with “space conditioning” via the use of an IHD is very suggestive that magnetic monopoles have been accessed in nature once one has **first** significantly increased the EM Gauge symmetry state of the experimental space via the use of human consciousness (see Equations 2 and 3) in the form of a specific intention to **condition** the experimental space to a higher level of physical reality!

It is important to recognize that, in our present world, this SU(2) EM Gauge symmetry state is a thermodynamically metastable state that must be **pumped up** to that level from the thermodynamically stable U(1) EM Gauge symmetry state by **sustained human consciousness** if one wants to reproduce the Figure 3b result. This is somewhat analogous to the D-space optical pumping required to produce an

inverted population of electron states in certain atoms necessary to generate “lasing” action of coherent optical beams in today’s orthodox science and medicine. Continued optical pumping is required for sustained laser action.

Returning to Figures 3, it seems reasonable to hypothesize that the experimental presence of a DC magnetic field effect in any space, even in the human body, can be taken as evidence for the existence and presence of this higher EM gauge symmetry SU(2) state rather than our normal U(1) state in nature. I and my colleagues tested this hypothesis on the human body via the use of simple bar magnets and advanced kinesiological techniques^(9,10). We found that the south-pole placed within ~ 1 cm of an active body point significantly strengthened the arm while the north-pole significantly weakened it. Our ultimate conclusion was that the acupuncture meridian system in humans was already at the SU(2) level. Further, from this result, we deduced that human intention, conscious or unconscious, directed at their own acupuncture meridian system, could significantly alter the flow of “chi” or “Qi” (the magnetoelectric spectrum of body energies) which, in turn, modifies the flow of electromagnetic energies in our U(1) gauge symmetry state body and thus our own behaviors and capabilities.

B. Significant measurement oscillations: The second very anomalous behavior to appear in the experimental data was the development of quite low frequency oscillations in the water pH-measurements, water electrical conductivity, water temperature and air temperature (pH, σ , T_w and T_A) in an IHD-conditioned room⁽¹¹⁾. The frequency of these waveform oscillations were always in the 10^{-1} to 10^{-5} Hertz range, far lower than any human electrophysiology measurements like EKG, EEG, etc, (although the Baroreflex frequency where the heart interacts to entrain the brain is at 0.14 Hertz). In addition, the fundamental frequency and all the higher harmonics in the periodic oscillations all **nest** with each other, i.e., all are identical for pH, T_w and T_A , no matter where in the room they are measured (σ not tested) as if something very fundamental in nature is **driving the whole room** in a coherent-like fashion.

To illustrate, when a Faraday cage (FC) containing a central water vessel with pH and T_w monitors is placed in an IHD-conditioned laboratory (see Figure 4)⁽¹²⁾ with a line of thermistors to monitor T_A located every 15 centimeters from the center of the FC to a location in the hall outside the room about 3.5 meters away, we were able to measure the spatial variation of the **oscillation amplitude**, ΔT_A (~3°C with a measurement accuracy of $\pm 0.01^\circ\text{C}$ depending on the type of thermistor used).

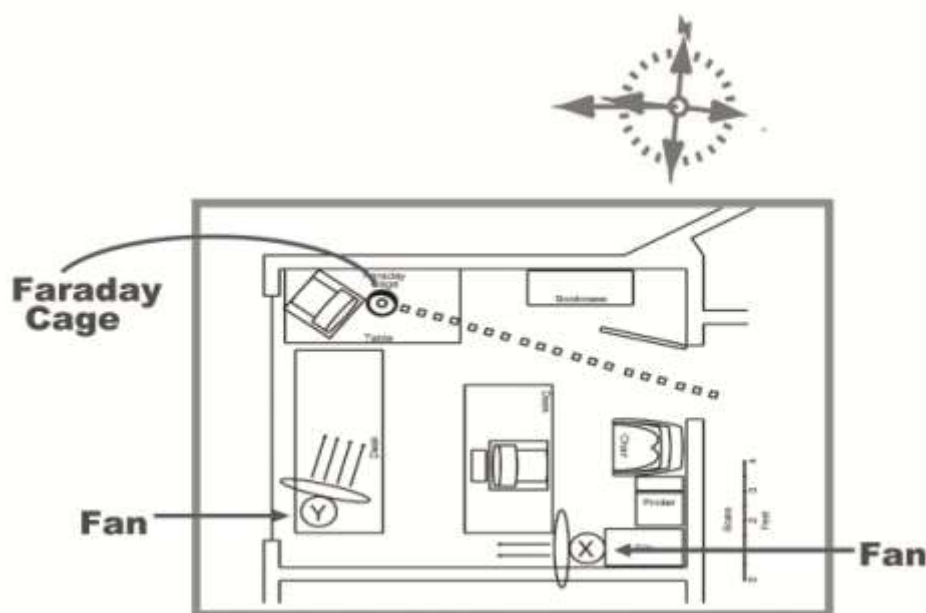


Figure 4. An IHD-conditioned laboratory with a line of thermistors monitoring T_A located every 6" from the center of the Faraday cage (FC) to a position ~3.5 meters from the FC (located in the hall outside the room).

Considering the water vessel as the source of these oscillations, ΔT_A does not decay with distance in a normal way (for a U(1) EM Gauge symmetry state space) but exhibits an anomalous intermediate maximum a few feet away from the cage as indicated by Figure 5. Looking at the frequency spectrum for ΔT_A , both close to the cage center and ~3.5 meters away in the hall with the door closed, Figure 6 shows the harmonic **frequency nesting** phenomenon over this distance of ~3.5 meters – very anomalous indeed!

Since temperature oscillations in air can arise if a temperature inversion exists at that location in the room (warm air below and cold air above), we wanted to check and see if this was **the cause** of the ΔT_A -oscillations. To do this, we put a fan on the floor at Position X in Figure 4 and another on a tabletop at Position Y⁽¹¹⁾. The strength of these fans was sufficient, at ~2 meters away, to strongly blow a piece of sheet paper off a table top placed close to the line of thermistors. Thus, if the ΔT_A -oscillations were due to a density inversion in the air, the air would become homogenized and the ΔT_A -oscillations would disappear. This **did not** happen⁽¹¹⁾! **Our major conclusion from this result was that the ΔT_A -oscillations does not have any significant relationship to something involving movement of the air molecules!**

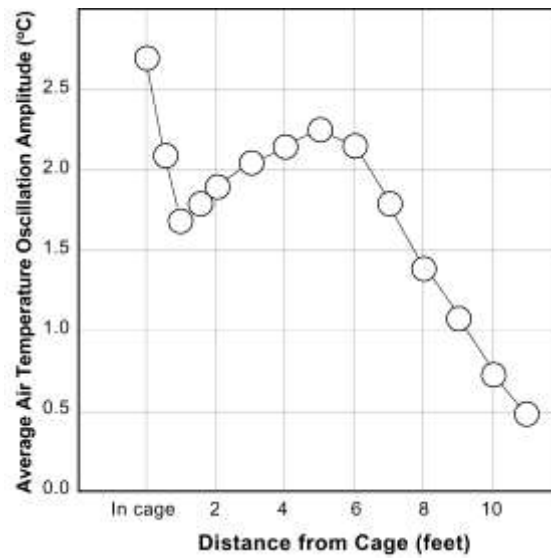


Figure 5. Showing that ΔT_A does not decay with distance in a normal way but exhibits an anomalous intermediate maximum about a meter away from the Faraday cage.

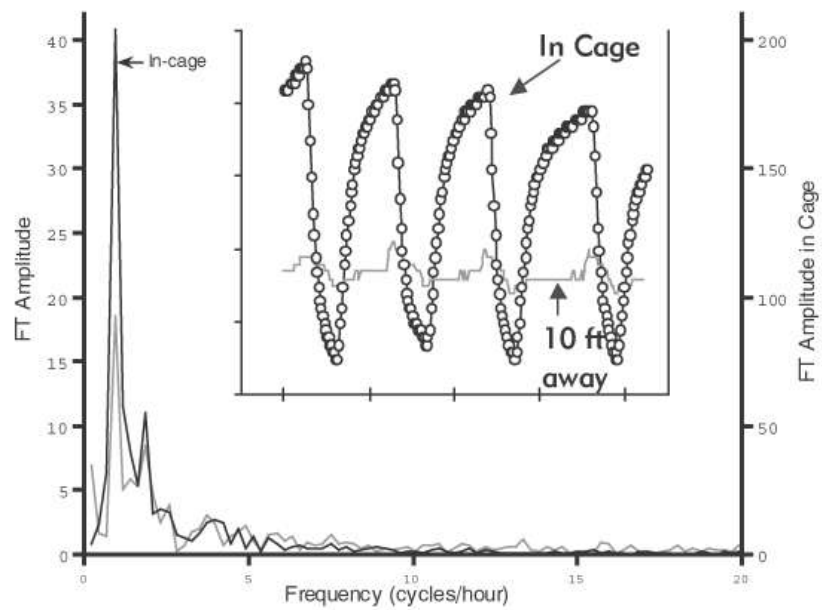


Figure 6. Showing a very anomalous harmonic frequency nesting phenomenon over ~ 3.5 meters in the IHD-conditioned room.

Our next ΔT_A -oscillations experiment involved removing this water vessel and Faraday cage out of this particular laboratory (see Figure 4) to a remote location ~100 meters away. A conventional expectation as a consequence of this action would be that the ΔT_A -spatial profile of Figure 5 would quickly collapse after the source was removed. However, this did **not** happen! Instead, the profile of Figure 5 remained as a **phantom** profile for quite some time and just **slowly** decayed over several weeks to months⁽¹²⁾!

Our conclusions from probing these oscillation characteristics are:

- (a) These oscillations arise from the vacuum level of physical reality. Here, the vacuum level is defined as all the space **between** the fundamental particles making up the electric charge-based atom/molecule level of physical reality.
- (b) This new vacuum level of physical reality is normally not strongly influenced by processes occurring in the gas phase but appears to exhibit macroscopic coherence effects.
- (c) This vacuum level exhibits qualities that are not spatially homogeneous or isotropic and generally exhibit patterns that change very slowly with time.
- (d) In an intention-host device-conditioned space, the local measuring instruments are all “enhanced” in capability so that they can somehow access the **new level** of physical reality and
- (e) perhaps the most important conclusion to be drawn from (A) the DC magnetic field effect and (B) the very low frequency, coherent, property oscillation effect is that we have revealed the existence of **two uniquely different levels of physical reality**. The first is our normal, electric charge-based atom/molecule level while the second is a **new** magnetic information wave type of substance functioning at the coarse physical vacuum level of reality. Since the latter is normally not accessible instrumentally from the U(1) state, one can deduce that the IHD “conditions” the experimental space to a higher gauge symmetry state of nature wherein these same but “conditioned” instruments can now also access this second level of physical reality to some degree. This type of property behavior can be meaningfully expressed in the form (see Figure 2)

$$Q_M = Q_e + \alpha_{\text{eff}}(t) Q_m = Q_{M_0} + (Q_{M_1} - Q_{M_0}). \quad (4)$$

Here, Q_M is the total measured value, Q_e is the U(1) Gauge state electric charge-based material value, Q_m is the coarse magnetic charge-based vacuum material value while α_{eff} is a coupler-material coefficient generated via the IHD as a function of time, t . $\alpha_{\text{eff}} \sim 0$ in our normal U(1) Gauge reality but can be increased in magnitude (+ or -) via the application of human consciousness in the form of an activated intention-host device.

This is a very profound example of a mind-body interaction of which much more will be said later. To fully digest what is to come, some theoretical foundation needs to be laid.

A Bit of Theory

In the 1890's, Planck⁽¹³⁾ showed us that energy exchanges between electric-charge-based atoms and molecules occurred in discrete-sized rather than continuous-sized steps. In the early 1920's de Broglie⁽¹⁴⁾ proposed to us that a quantitative particle/pilot wave concept had theoretical validity and, less than a decade later, this concept was also found to have experimental⁽¹⁵⁾ validity. Schrödinger's wave equation, a second-order distance-time differential equation containing a distance-time potential function, yielded a mathematical solution for particle wave functions⁽¹⁶⁾. Thus, the key corner stones for today's quantum mechanics (QM) had been laid. Much more recently, Harrison has shown us that the simultaneous coexistence of particle and waves in distance-time allows one to ultimately calculate all the equations of today's QM⁽¹⁷⁾. Thus, today's QM is very well suited as an analytical tool for that class of natural phenomena that are distance-time-dependent. However, it is not well suited for serious investigation of those classes of natural phenomena that are **not** distance-time-dependent. Natural phenomena like consciousness, intention, emotion, mind, spirit, etc., do **not** appear to be distance-time-dependent phenomena; thus, our reference frame (RF) for viewing nature's manifold expressions must be expanded appreciably if one wishes to fully understand mind-body phenomena.

As our next step, I wish to elucidate some quantitative understanding of the de Broglie particle/pilot wave concept. However, before doing so it is important for the reader to realize that the waves in nature that are cognitively accessed by humans are not the continuous waves described in textbooks. Rather, they are merely modulations of particle densities (water waves, sound waves) and particle flux densities (light waves).

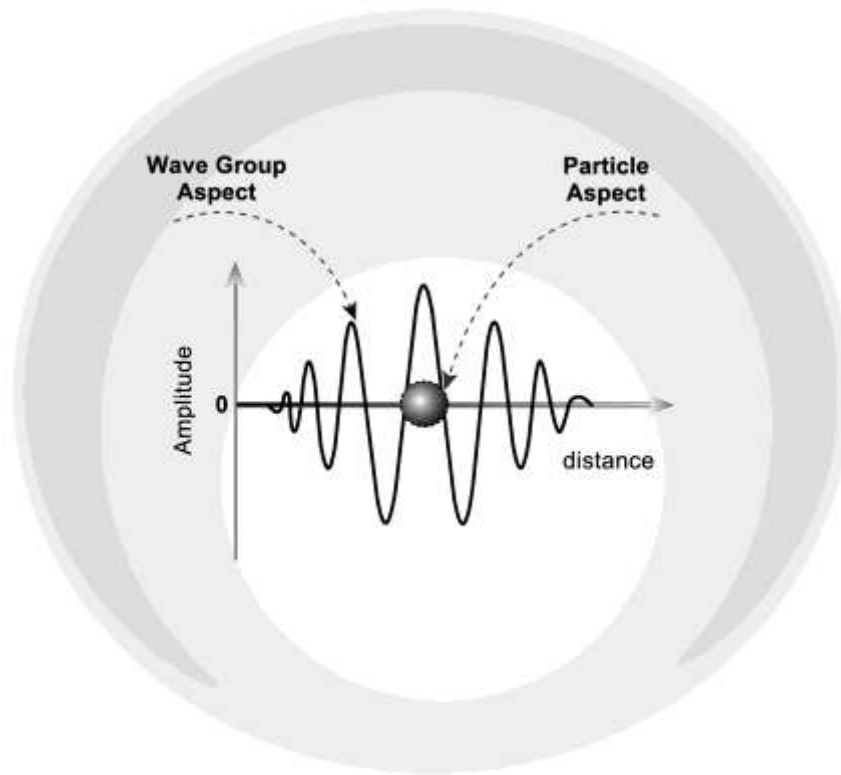


Figure 7a. The De Broglie particle/pilot wave concept of the 1920's, for which he won a Nobel Prize, proposed that every particle had a pilot wave envelope enclosing it and moving at the particle's velocity. This was eventually to be called "the wave particle duality of QM".

Figure 7a is the commonly held picture of the de Broglie particle/pilot wave concept obtained by using a **non-relativistic** analysis of the situation⁽¹⁸⁾. Via this type of analysis one finds that

$$v_g = v_p \quad (5a)$$

where v_p is the particle velocity and v_g is a wave group velocity. However, when one uses a relativistic analysis of the situation⁽¹⁹⁾, one finds that

$$v_g = v_p \text{ and } v_p v_w = c^2 \quad (5b)$$

where v_w is the true pilot wave, v_g is the group wave generated by motion of the true pilot wave and v_p is the relativistic particle velocity. This situation is illustrated in Figure 7b. From Equation 7b, since

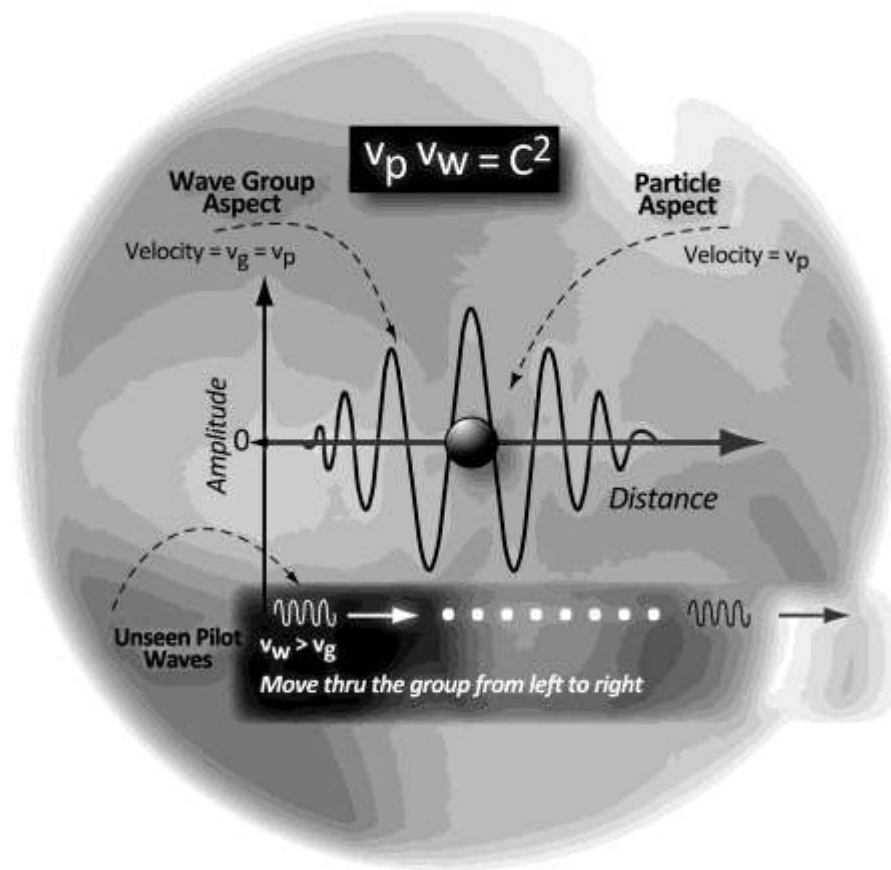


Figure 7b. Schematic of true pilot waves.

distance-time-only relativity theory tells us that $v_p < c$, always, $v_w > c$, always. Thus, these pilot waves stream into view from the left at $v_w > c$ to both move the group wave along at $v_g = v_p$ and stream out of view to the right. Since $v_w > c$, it is unobservable to us both cognitively and via conventional instrumentation.

This is an extremely important theoretical finding but it appears to violate distance-time relativity theory since we have a faster than c pilot wave interacting with a slower than c group wave, v_g , interacting with an electric particle moving at the same velocity, v_p .

In order to resolve this relativistic dilemma, this author has proposed the existence in nature of a moiety, from the domain of emotion which lies beyond distance-time, that can travel at $v > c$ as well as $v < c$ to act as a coupler substance (deltrons) illustrated in Figure 8⁽²⁰⁾. The deltrons, which also appear to

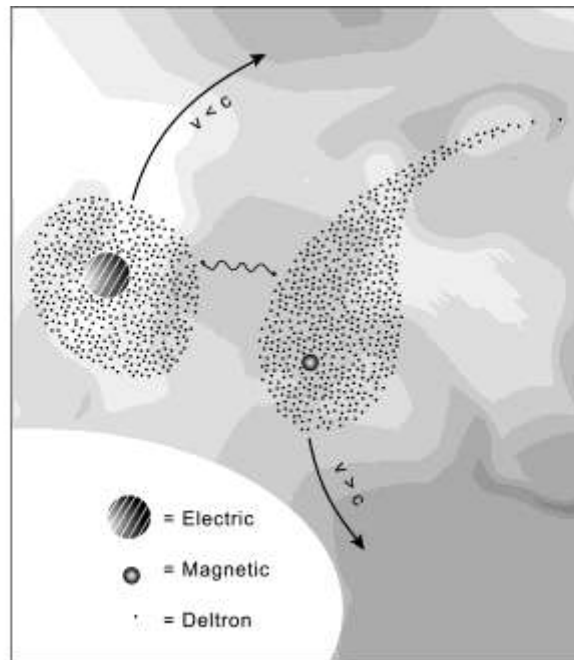


Figure 8. A higher dimensional level substance, labeled deltrons, falling outside the constraints of relativity theory and able to move at velocities $v \gtrless c$, acts as a coupling agent between the electric monopole types of substances and the magnetic monopole types of substances to produce both electromagnetic (EM) and magnetoelectric (ME) types of mediator fields exhibiting a special type of “mirror Principle” relationship between them.

exhibit qualities of consciousness, form bound sheaths around both the $v < c$ particle and the $v > c$ moiety. Thus deltron/deltron interactions are thought to produce indirect interactions between the $v < c$ particle and the $v > c$ moiety.

The next piece of the theoretical picture is to first ask where electric atom/molecule substance comes from in nature and then expand that picture to include the subtle domains of substance needed to “flesh-out” the Ladder of Understanding illustrated in Figure 1. The original concept came from Dirac⁽²¹⁾ in the mid-1920’s and is illustrated in Figure 9. Dirac’s hypothesis was that a cosmic ray of

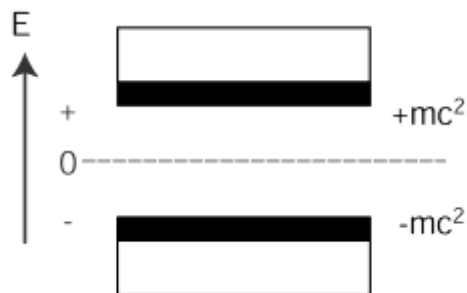


Figure 9. Schematic energy spectrum associated with the Dirac analysis. A band of forbidden energies exists between $E = \pm mc^2$ for particle-antiparticle creation of mass $2m$.

sufficient energy traveling through the negative energy sea of the physical vacuum suffered an interaction event with the “stuff” of this negative energy sea so as to create an electron-hole pair with sufficient excess energy to cross the gap of disallowed energy states into the lowest levels of the positive energy state band⁽²¹⁾. This hole became the first piece of anti-matter, called the positron experimentally discovered by Anderson in the early 1930’s.

The orthodox scientific community hated the concept of negative energies because they did not understand such a concept even though it is a natural consequence of the relativistic energy equation for a particle. However, one notes from Figure 10, which is a quantitative plot of both the potential well

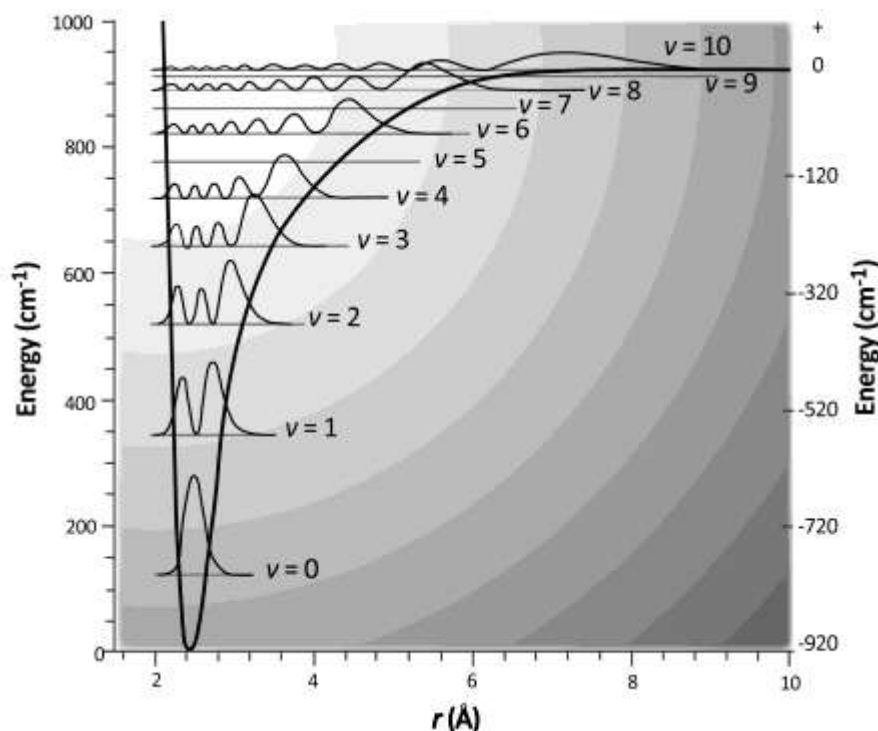


Figure 10. Potential energy for the Be₂ dimer as a function of Be atom separation distance, r , plus the first ten bound vibrational levels.

and the allowed electron energy states in that well as two beryllium atoms interact to form the Be₂ dimer⁽²²⁾. Thus, if one takes the origin of energy at the minimum of the well, all these electron energy states have positive energy relative to that origin; however, if one takes the origin as the dissociation location of this Be₂ dimer, all these electron states have **negative energy** relative to that chosen origin. Further, if we postulate the presence of an over-arching potential well of higher dimensional order enfolded all of what we might call nature (all of the physical vacuum), then Dirac’s negative energy sea

can be readily appreciated⁽²¹⁾. For many, this might be taken as allowed evidence for the existence of God!

This author has expanded upon Dirac's original energy band concept to provide some detailed structure for the physical vacuum⁽²³⁾. This is illustrated in Figure 11a which represents both a word

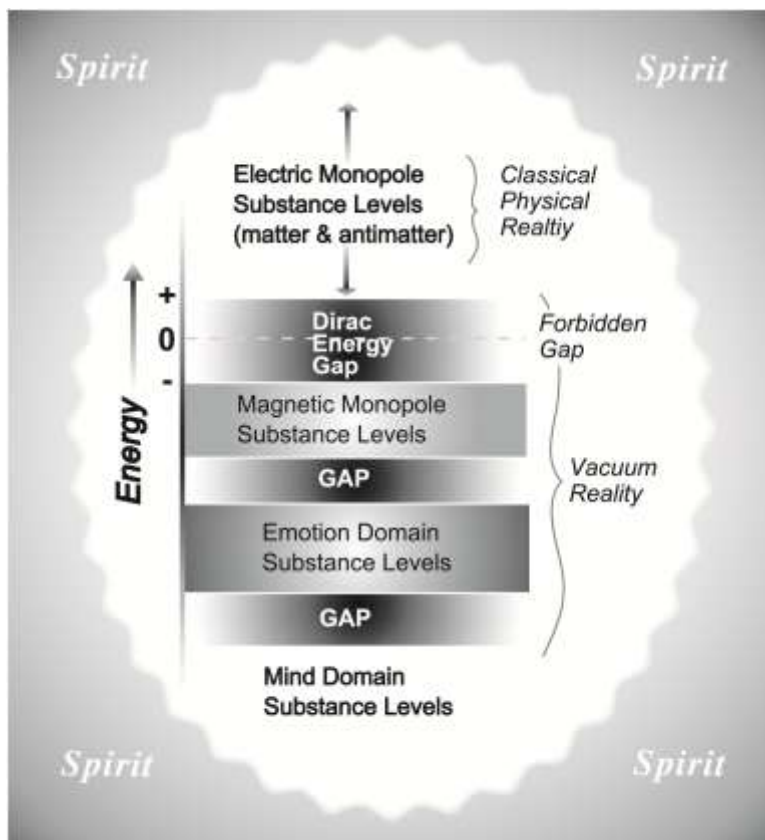


Figure 11a. An energy level diagram embracing both classical physical substances and “unseen” vacuum substances.

Identification for the various rungs in the Figure 1 “Ladder of Understanding” and a proposal for discriminating the various energetic/information levels of the evolving human. Further Figure 11b

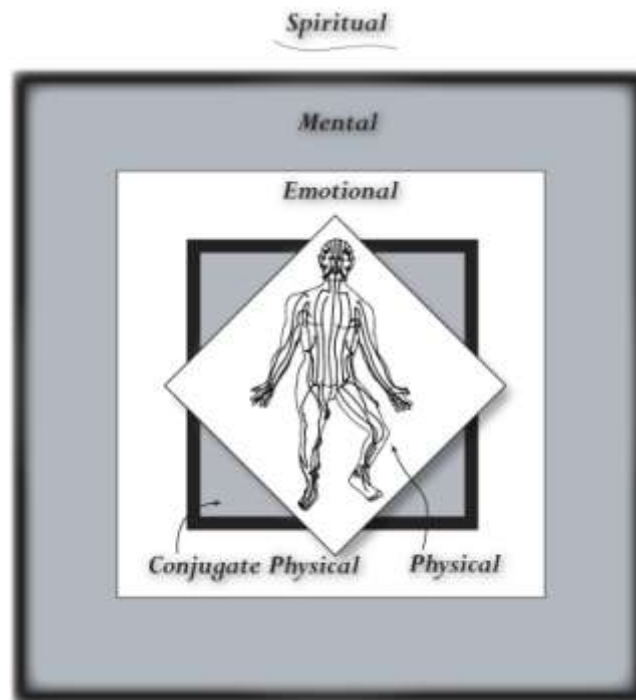


Figure 11b. A structural representation of our RF with the duplex space in the center. If one counts the entire duplex space as a 4-space, then the entire multidimensional representation is a 7-space. If instead, we count the duplex space as a unique member of the general 8-space, then our RF is eleven-dimensional.

discriminates the higher dimensional nature of (1) the magnetic information wave band, (2) the emotion domain band, (3) the mind domain band and (4) the spirit domain band of this simulator or classroom in which we are growing and evolving⁽²³⁾.

One of the author's working hypotheses is that each of these bands of vacuum state energies house successively finer types of wave-like substance moving at successively higher and higher super luminal velocities (all invisible to conventional sensor probes from the U(1) EM Gauge symmetry state) as one proceeds from the magnetic information wave domain to the spirit domain⁽²⁴⁾. Because of their wave-like nature, even though of different bands of qualitatively different kinds of substance, frequency-type resonances between different bands are expected to exist so that energy/information, in principle, can be exchanged between bands.

With this base of theoretical background, we shall now focus our attention on the first and second rungs of the Ladder of Understanding. From the earlier experimental findings of this paper, there appears to be two uniquely different levels of physical reality (see Figure 2 and Equation 4) that can be uncoupled ($\alpha_{\text{eff}} \sim 0$) or partially coupled ($\sim 0.1 < \alpha_{\text{eff}} < \sim 0.9$). These two are the electric charge-based atom/molecule subluminal substance and the magnetic charge-based, information-wave, superluminal substance. As a simple metaphor, (1) the uncoupled state is the U(1) electromagnetic (EM) gauge

symmetry state where the only mathematical undetermined factor is the phase angle of the electron wave function⁽⁸⁾ so one could classically visualize electrons moving in discrete orbits around a nucleus (the Bohr model) where much, much smaller magnetic information wave moieties zip through the empty spaces available between these orbits without interacting with or perturbing the slowly moving electrons in their orbits. For case (2), when a sufficient concentration of activated deltrons are present, one has coupled state formation. This is the SU(2) EM gauge symmetry state where there are now two mathematical undetermined factors present, (a) the electric monopole (electron) wave function phase angle and (b) the magnetic monopole wave function phase angle. Here, the magnetic information wave moieties begin to orbit around the individual electron orbits which, in turn, orbit around the atom's nucleus. This is a "dance" within a "dance" which, for macroscopic systems, leads to a much richer thermodynamics and a significantly larger thermodynamic free energy, G . (see Equation 3b)

In passing, it should be noted that gauge symmetry **breaking** occurs where the activated deltron population decreases below some critical value (that is presently unknown) and the system drops to the U(1) EM gauge state level from which today's orthodox science instrumentation is completely unable to access magnetic monopoles (as a multitude of experiments from the 1960's and 1970's has shown).

The final piece of this theoretical perspective deals with the first coherent step in the development of a new reference frame for viewing nature's distance-time-dependent class of phenomena. Such a new reference frame (RF) is essential if we are to ultimately understand mind-body phenomena.

This proposed new RF is a duplex RF consisting of two, **reciprocal**, four-dimensional subspaces, one of which is distance-time. Thus it is a special member of an eight-dimensional RF (actually seven-dimensional because of some specifics connected with time). The distance-time subspace (D-space) is ideal for subluminal, electric-charge-based particle behavior while the reciprocal subspace (R-space) is a frequency domain, ideal for superluminal, magnetic-charge-based information wave behavior. If negligible excess activated deltrons are available, substances of these two subspaces do not meaningfully interact with each other and each is in a U(1) gauge symmetry state. As more deltrons are activated, so, in Equation 4, α_{eff} appreciably increases in magnitude, macroscopic coupled state reality obtains and the materials of the two subspaces begin to seriously interact with each other. Now, human intentions can directly alter the properties of this **composite** of coupled state/uncoupled state material⁽²⁵⁾.

From a mathematical perspective, because the two subspaces are reciprocals of each other, thermodynamic equilibrium between the very different materials of the two subspaces, which can only be attained when α_{eff} is of significant magnitude, requires that a property or quality in one subspace has a conjugate property or quality in the other subspace given mathematically by deltron-modulated Fourier transform relationships⁽²⁶⁾. Now, a new and superior formulation of an expanded quantum mechanics that meaningfully incorporates the effects of consciousness as a significant experimental variable is possible. Thus, mind-body effects can now, in principle, be seriously addressed!

The Three Selves Postulate

Keeping Figure 11a in mind as a classification of the hypothesized substances available to us in the universe, I have proposed elsewhere⁽²⁷⁾ that Figure 12 represents a useful metaphor for describing

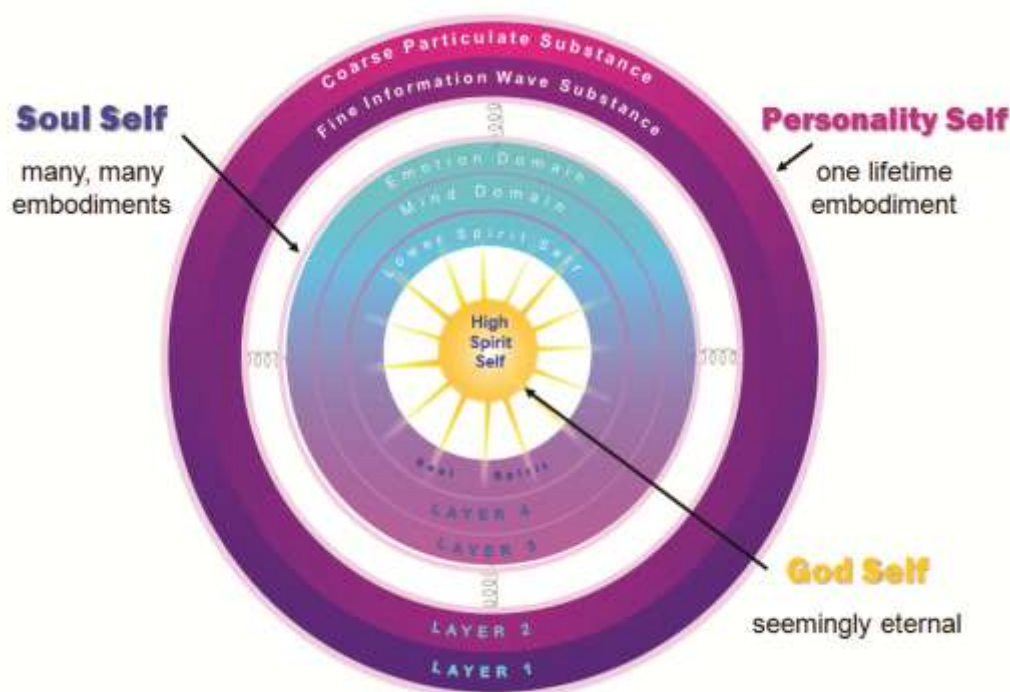


Figure 12. An energy level diagram embracing both classical physical substances and “unseen” vacuum substances.

the whole person. This metaphorical self consists of three key zones: (1) the outermost zone, consists of two interpenetrating layers of (a) uncoupled electric charge-based substance (outermost layer) and (b) magnetic charge-based substance (innermost layer), with the coupled state acupuncture meridian system functioning in this inner layer, constitutes **the personality self**. This personality self is thought to be our biobodysuit that we put on when we are born into this distance-time classroom and shuck off when we appear to depart from this classroom. (2) the middle zone, consisting of three interpenetrating layers of (a) emotion-domain (including deltrons) substances, (b) mind-domain substances and (c) an aspect of spirit domain substances, thought to be the entity that is truly evolving in this overall “life” process, is called **the soul self**. And (3) the central zone, is thought to be the high spirit self, **the source self** or the God self, the creator of all these various substances, are at the very core of our being.

All these various unique substances exist within the same space but (a) have different mass densities, (b) travel at different velocities (most at $v > c$), (c) have different ranges of energy (mostly at $E < 0$), (d) have different degrees of coherence relative to our source self and thus (e) have different

fundamental information content densities. The substances associated with the spirit level (the finest substance) to the substances associated with the electric charge-based atom/molecule level form a relative universe (a simulator so to speak) that can be altered in any way imaginable by humans via direct application of consciousness and intentions. The substances of the high spirit level are thought to form an absolute universe⁽²⁸⁾. A metaphorical picture of this construct is presented in Figure 13.

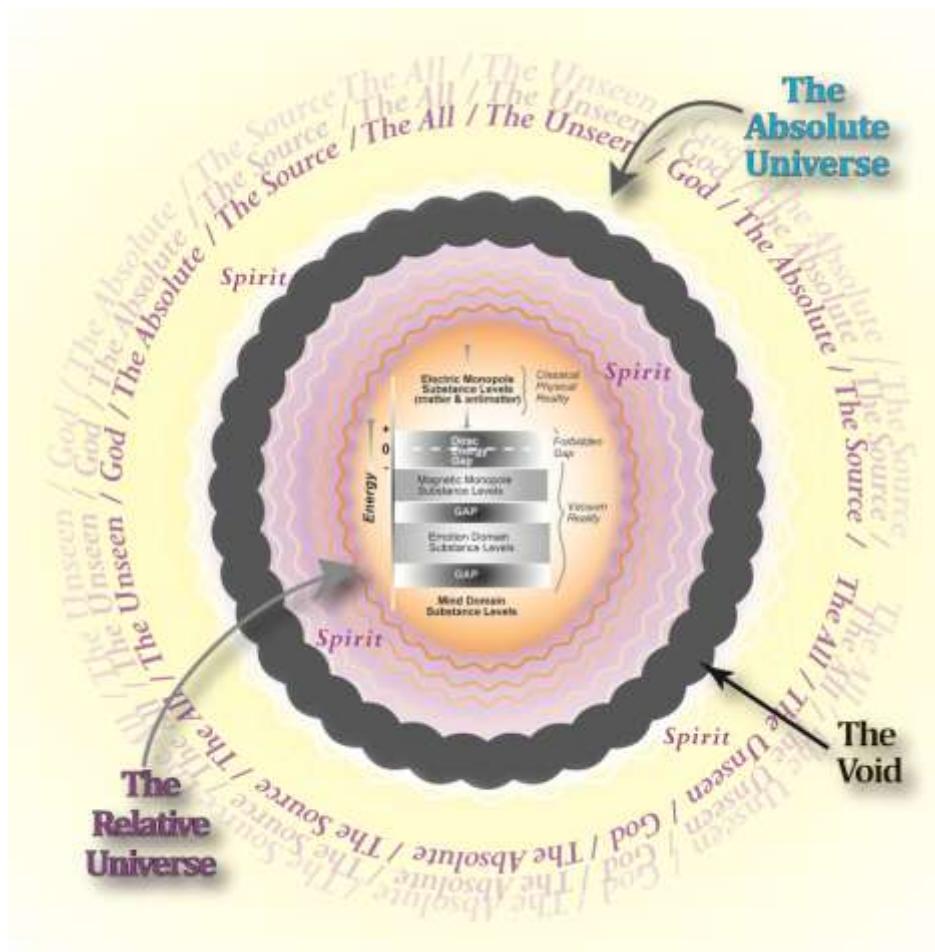


Figure 13. An energy level diagram embracing both the relative universe with expansion into the absolute universe lovingly guided by “the all”.

To me, we are all spirits having a physical experience as we ride the river of life together. Our spiritual parents dressed in these biobodysuits and put us in this playpen that we call a universe (a cosmos – a simulator) in order to grow in coherence, in order to develop our gifts of intentionality and in order to become what we were intended to become - co-creators with our spiritual parents!

For me, **consciousness** is a byproduct of **spirit** entering denser matter. However, spirit seems to **need built-in infrastructure** so that it can attach to that denser matter. This is what we must create in our personality and soul selves via our **thoughts, attitudes and actions**. This is our bootstrap process for becoming more awake, more aware and more conscious. In this way we build more infrastructure into the various levels of self. We are the product of our physical and non-physical life processes and are ultimately **built** by our personal **choices/efforts** that we make in this “simulator”. The cosmos is our classroom and, from Equations 3, as we build ourselves via the information content inherent within the infrastructure we have created in our multidimensional selves, we continuously **restore** the thermodynamic free energy potential to our cosmos!

Before proceeding to discuss the application of this experimental data, theoretical constructs and my working hypotheses, to the mind-body relationships, it is perhaps useful to illustrate two benefits to humans associated with (1) growing in personal coherence and (2) seriously developing our gifts of intentionality. First, on the topic of personal coherence, consider a 60 watt light bulb. When switched on, it gives some light but not a great deal of light. This is because the number of EM photons exiting the light bulb surface per unit time are largely out of phase with respect to each other so that a great deal of destructive interference occurs. However, if one could somehow adjust the phase of each of these photons so that they were totally in-phase with each other then, for the same number of photons exiting the light bulb per unit time, the energy density would have been increased to a value many times that at the surface of the sun. The same situation exists with respect to humans. Their latent potential is **huge** with respect to their present **actualization** of that latent potential. However, by conscious application of inner self-management techniques like yoga, Qigong, HeartMath, Sufism, etc., great increases in their internal coherence state become possible⁽²⁹⁾.

One might reasonably ask what is the latent potential energy stored in the physical vacuum ($E < 0$ states) relative to that stored in our physical cosmos because that would give us a type of quantitative estimate for what is to be gained by working on the various strata of the physical vacuum. Great physicists like John Wheeler, David Bohm and others have calculated that, for today’s quantum mechanics (QM) and relativity theory (RT) to be internally self-consistent, the physical vacuum is required to contain a latent energy density of $\sim 10^{94}$ grams per cubic centimeter with each gram being converted to EM energy via the Einstein, $E = mc^2$, relationship. This is a very large number but what does it mean to us in a practical example?

Astronomers have given us a number for the average mass density in the physical cosmos⁽³⁰⁾. Multiplying this number by the volume of a sphere of radius 15 billion light years gives us a very large number for the total EM energy storage present in our physical cosmos. On the other hand, we can calculate the volume of physical vacuum present within the interior of a single hydrogen atom (mostly empty space) which comes to about 10^{-24} cubic centimeters (cc). When we multiply this very small volume by 10^{94} grams per cc, we obtain a number that is about a trillion times larger than the total **EM** energy stored in the physical cosmos. Thus, adding up all the electromagnetic energy stored in all the planets, stars and cosmic dust in our physical cosmos, we find that the number is trivial compared to

that stored in one cubic nanometer of physical vacuum. One must therefore conclude that exploration by humans of the physical vacuum both within themselves and outside of themselves is tremendously important for humanity's future.

Application to Mind-Body Relationships

- A. The Silver Colloid Metaphor: It is well-known that if one takes a vessel of water with bacteria in it and also sprinkles a bunch of silver (Ag) colloid particles in it, most of the bacteria will be killed. From this result, people presumed that physical contact between the bacteria and the silver was the killing mechanism. This led to what one labels as **chemical medicine** and the founding of the pharmaceutical industry.

What is not so well known is that (1) if one sets up a water vessel containing bacteria and also sets up a nearby fluorescent lamp containing silver electrodes (or a very thin film of Ag on the walls of the tube), (2) ignites a gas discharge in the tube and (3) places an outside lens system to focus some of the emitted light onto the water vessel, one also kills the bacteria in the water. Thus, one learns that it is not just physical contact between the bacteria and the silver surface that is important, rather, it is one of more unique EM photons in the emission spectrum of Ag that is sufficient to kill the bacteria⁽³¹⁾. This process leads to **energy medicine** as exemplified by the use of cold laser technology as a healing methodology.

From the earlier content of this paper, it should also be clear that the use of an intention-host device (IHD) specifically imprinted to significantly weaken the immune systems of the bacteria in the water vessel will also render the bacteria to a harmless or totally dead state. This type of process was eventually lead to **information medicine** acting via an Equation 3-type of physics.

- B. The Zeroth-order Quantitative Approximation: As discussed earlier, in psychoenergetic science applied to physical reality (the personality self), there are two uniquely different levels of substance plus deltrons involved in partially coupled state processes (see Figure 2 and Equation 4) expressed symbolically as

$$Q_M = Q_e + \alpha_{\text{eff}} Q_m. \quad (4)$$

Here, Equation 4 is just the zeroth-order mathematical approximation for the general result illustrated by Figure 2. Higher order mathematical approximations can be readily derived but involve the taking account of a variety of macroscopic information entanglements that are beyond the scope of this

introductory paper. Our present working hypothesis to explain the nature of the Figure 2 results is illustrated via Figure 14.

A specific intention is thought to originate at the level of spirit, imprinting a specific information stimulus pattern on the nodal points of the mind lattice⁽³²⁾ in our simulator. This, in turn, causes activation of this nodal network to radiate two complementary patterns, one to the R-space magnetic information wave domain to represent the essential information inherent in the original intention and the other to activate a spectrum of deltrons from the emotion domain substances. This deltron population is thought to act as a kind of “toner” in a Xerox machine and, via the R-space/D-space, deltron-modulated Fourier transform process, shift the information inherent in Q_m to the experimental measurement result, Q_M , of Equation 4.

As mentioned much earlier, in Equation 4, Q_M is the actual experimentally measured value of the property quality, Q , under consideration in the original intention; Q_e is the contribution coming from the electric charge-based atom/molecule level, Q_m is the contribution coming from the intention affected, magnetic charge-based information wave level and α_{eff} is the deltron coupling coefficient which can range from zero to one.

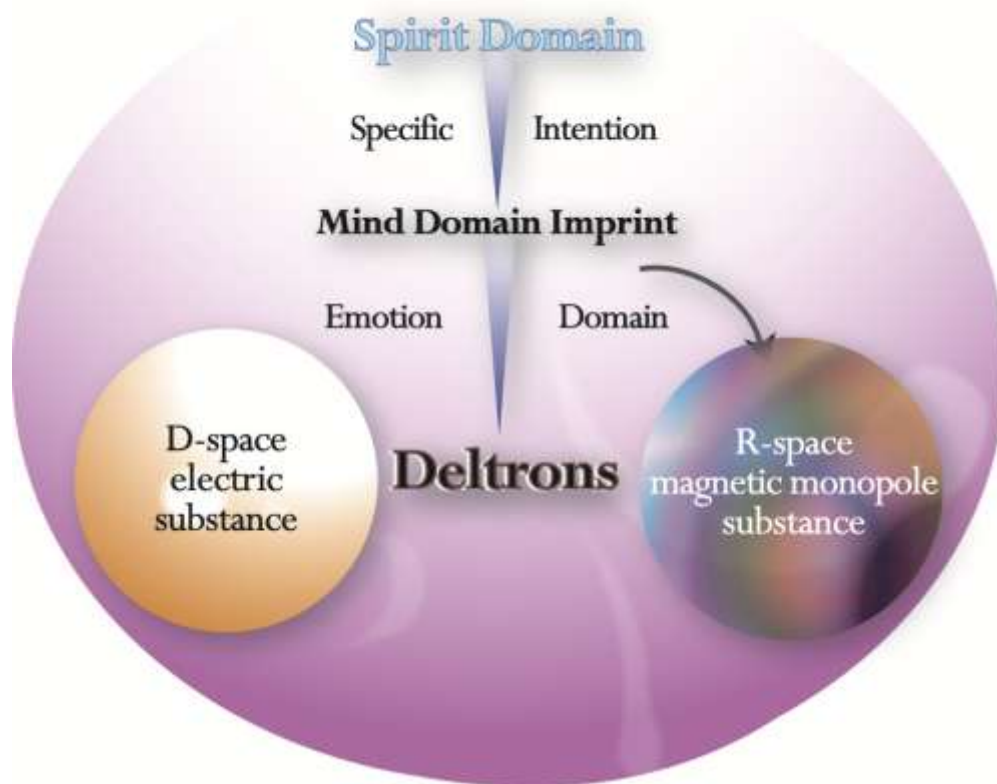


Figure 14. Human consciousness, and specifically human intention, appears to be able to activate this deltron population, and thereby modulate this electric/magnetic monopole substance coupling, so as to alter the specifics

of the EM state of the space wherein an object rests, and thus the experimentally measurable properties of that object.

It appears that, in at least all vertebrates, the acupuncture/meridian system is **always** at the partially **coupled state** of physical reality. Thus, both unconscious and conscious intentions with **strong desire** can enhance the quality and intensity of chi/Qi (the magnetoelectric (ME) spectrum) flowing in this system. This, in turn, induces electric (EM) currents to flow in our electric charge-based atom/molecule body to vitalize the organs, bones, muscles and tissues of this aspect of our personality self.

For the manifestation of large mind-body effects in humans, the following steps are useful: (1) the recognition that we are dealing, here, with mind/emotion body psychoenergetic phenomena, (2) the recognition that sustained, long-term, attention/intention processes are involved for very successful results, (3) the recognition that human intentions work directly on the innermost layer of the personality self and then indirectly on the outermost layer and (4) the recognition that the human unconscious, the human acupuncture meridian system and homeopathy all function in this innermost layer of our personality self which is a template for all the evolutionary processes occurring in our familiar electric atom/molecule layer.

Certainly healing interventions by medical practitioners can occur at both the Q_e **and** the Q_m level of physical reality in Equation 4. However, it is important to realize (a) that the mathematical sign of the Q_m -term can be made of either positive or negative value via intention, (b) that, for simplicity, although Q_e is mostly a mathematical scalar, Q_m is always at least a vector and thus always leads to information entanglement between the several parts of a medical “system” event (doctor + treatment + placebo +patient) so that a placebo is not an inert entity in the mathematical formulation of the system event but rather is elevated to the state of a dynamic “player” via information entanglement with all the other “players” in the overall event and (c) the deltron population active in the α_{eff} -term of Equation 4 is crucial since it appears to be quite responsive to human consciousness and human intent. This author strongly recommends that the reader accesses my website, www.tiller.org, to read and freely copy any of my White Papers that have been placed there, especially White Paper XV if one is interested in self-healing and preventative medicine.

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