

Physics and Consciousness

A New Paradigm in Quantum Interconnectedness

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Quantum Interconnectedness has received some attention in the last decades; physicists have come to realize that the universe is interconnected in much subtler ways than had once thought. In quantum physics the observer and the observed can no longer be separated and the whole is more fundamental than the part.

The mathematical principles of this "new" science may help explain and recognize consciousness as a fundamental part of reality. The similarities between mind and quantum theory undoubtedly abound. The intent of this web site, however, is an attempt to explain *some* of the dynamics of physics and how it quantumly relates to consciousness.

When we have a narrow perception of reality it creates illusionary lines of separation. This separation transverses from personal, societal, cultural and expanding into the world. The interconnectedness of the parts of the whole allows us to realize our oneness with all things.

Science

*"We may therefore regard matter as being constituted by the regions of space in which the field is extremely intense...There is no place in this new kind of physics for the field and matter, for the field is the only reality."
Einstein*

Albert Einstein, with his general theory of relativity, opened the doors of science along with the mystical realities. Einstein theorized that space and time are intertwined and that matter is inseparable from an ever-present quantum energy field and this is the sole reality underlying all appearances. This theory challenged the basic assumptions about the universe and what it contained.

Physicists found that the most basic atomic particles in the cosmos comprise the very fabric of the material universe. An electron, for example, can be shown to be both a wave and a particle depending on the observer's perspective.

Physicist David Bohm, in his plasma experiments, at the Berkeley Radiation Laboratory, Bohm found that individual electrons act as part of an interconnected whole. In plasma, the gaseous electrons more or less assume the nature of a self-regulating organism, as if they were inherently intelligent.

This scientific discovery of Non-Locality, the wave/particle duality, meant that everything is joined or connected together. Space and time is composed of the same essence as matter. Bohm found this to be a conscious atomic sea and extending out from this sub-atomic reality, all of material creation may also be said to be conscious. Since all matter and events interact with each other, time (past, present, future) along with space and distance, all is relative to the observer and operate as one under the law of Non-Locality.

"A principle related to nonlocality is called Bell's Theorem. This is a quantum physics law that says that once connected, objects affect one another forever no matter where they are. Following the principle of Bell's Theorem,...an invisible stream of energy will always connect any two objects that have been connected in any way in the past."

This meant that everything is connected to everything else and that physical reality is BOTH waves and a particles. This model birthed the "holographic universe" idea, the powerful conscious energy that the whole can invariably be found in the tiniest particles: an atom of a blade of grass to the most distance galaxies. The building blocks of atoms are merely, "parcels of compressed energy, packed and patterned according to certain mathematical formulae."

"Princeton Engineering Anomalies Research Program at Princeton University, ..refers to quantum concepts such as the principles of complementarity (the action in one system can effect the actions of another system at a quantum energetic level, free of the limits of time and space) and wave mechanical resonance (matter and energy exchanging manifestations as vibrating waves and particles)"
(excerpts from the Heart's Code see Links)

Matter and Energy are two poles of the same unity. Shamans and Mystics call this Oneness or Interconnectedness.

*"I believe a leaf of grass is no less than the journey work of the stars" also "I am large, I contain multitudes."
Walt Whitman*

Michael Talbot, in "The Holographic Universe", describes all of material creation as a "ripple...a pattern of excitation in the midst of an unimaginably vast ocean" and "despite its apparent materiality and enormous size, the universe does not exist in and of itself, but is the stepchild of something far vaster and more ineffable."

Talbot continues, "Bohm, believes that our almost universal tendency to fragment the world and ignore the dynamic interconnectedness of all things is responsible for many of our problems...we believe we can extract the valuable parts of the earth without affecting the whole...treat parts of our body and not be concerned with the whole...deal with...crime, poverty, and drug addiction without addressing... society as a whole."

In the book "Stalking The Wild Pendulum", Itzhak Bentov outlines sound and vibrational wave behaviors, atomic molecular structure, realities and time along with the quality and quantity of consciousness and the various levels of our realities. We know that reality is made up of two components, one an immutable line-background and the other dynamic, which are a "vibrating aspect of the same thing", then we know that mind and matter are made of the same basic stuff." Restated: "We compare solid matter to ice and mind or consciousness to steam or vapor, all being the same basic stuff in different form."

Superstring Theory:

The Kaluza-Klein Theory was the first theory of higher dimensions. It simply states the gravity in which light could be explained as 5th dimensional vibrations. This evolved into "Supergravity Theory" which then led physicists to the "Superstring Theory" - it postulates that all matter consists of vibrating strings. This theory raised the standards and levels of mathematical science because it seems to explain all the fundamental laws of nature.

"The symmetries of the subatomic realm are but remnants of the symmetries of higher dimensional space"
Michio Kaku

Michio Kaku says in "Hyperspace", "physicists...are now seriously studying multiply connected worlds as a practical model of our universe." Multiply connected spaces mean that spaces are not retractable and cannot be shrunk, as in the example of wormholes. Theoretical physicists demonstrate parallel universes by two parallel planes connected by a tube/wormhole which has time/space travel implications. Superstring theory also assumes there are an infinite and alternate series of parallel universes that exist. This can be thought of a layers of pages in a ream of paper, each layer connected by a dimensional "tube".

George Bernhard Rieman, who was the first to lay the mathematical foundation of geometries in higher dimensional space, birthed the idea of a "simultaneous 4th Dimension". He claimed universes are "completely self-consistent and obey their own logic." He tried to discover "the unity of all physical laws" which appear simple when expressed in higher dimensional space. In this process, he redefined Euclidean geometry.

In an attempt to visual this higher dimensions, Charles Howard Hinton mathematically conceptualized the ability to "see" four dimensional objects which he deemed the hypercube, a tesseract: a hypercube that has been unraveled and viewable in the 3rd dimension.

The importance and significance of mathematics and the profound role we have come to understand

within nature can also be found in the Fibonacci numbers. This logarithmic series of numbers demonstrates the occurrence of many analogous spiral forms in nature. This underlies fractal mathematics and allows imaging of our natural world. Fibonacci shapes are found in the shape of galaxies, the nautilus shell and the double helix of the DNA molecule to name a few.

Unification Theory:

The "Unification Theory" is built on the fundamental knowledge of physics, the oneness and interrelationship and nature: ecologically, individually and the whole world. The knowledge of this system and its dynamic capacity to survive, grow and transform in relation to the other dynamic systems is most profound. The theory encompasses all living and non-living systems that exist, which parallels the particle and wave duality and its coexistence within the whole universal system of operation. Countless mathematicians, physicists, philosophers and religious thinkers have attempted throughout the ages to find the one thing that can tie all things together.

Consciousness:

With all the break-throughs in the dynamics of our natural world, the topic of physics and consciousness is becoming more well renowned by physicists. In the Spring of 2003, the Quantum Mind Conference on "Consciousness, Quantum Physics and The Brain" was held Arizona, USA. Their web site states, "recent experimental evidence suggests quantum nonlocality occurring in conscious and subconscious brain function, and functional quantum processes in molecular biology are becoming more and more apparent. Moreover macroscopic quantum processes are being proposed as intrinsic features in cosmology, evolution and social interactions."

Perhaps in knowing we are all a part of this Non-Locality, or Oneness, we can make strides to improve out society, our nation and our world.

"a scientist can have, almost approaching a religious experience, as to realize that we are children of the stars, and that our minds are capable of understanding the universal laws that they obey."
Michio Kaku

Interconnection

*"The Tao gives birth to One.
One gives birth to yin and yang.
Yin and yang give birth to all things...
The complete whole is the complete whole.
So also is any part the complete whole...
But forget about understanding and harmonizing and
making all things one. The universe is already a
harmonious oneness; just realize it."
(46 The Hua Hu Ching)*

Since all natural phenomenon are ultimately interconnected, and in order to explain any one of them we need to understand all the others, which is obviously impossible. However, science has formulated the Bootstrap Theory - "The bootstrap philosophy represents the culmination of a view of nature that arose in quantum theory with the realization of an essential and universal interrelationship." The "interdependence of all things" can be found in many spiritual traditions.

Ed McGaa, an Oglala Sioux spiritual teacher, for instance remarked, "Interdependence is at the center of all things. The separation between us and nature is a mirage. The perception is the result of ignorance."

The Buddhist scripture Avatamsaka Sutra says: "All is one" ..every being in the universe depends on every other thing and every other being for their existence. This Sutra also illustrates the timelessness of past, present and future as "infinite time and endless space" - "each containing each other and depend on one another for existence and are not separable by knowledge". This also demonstrates the idea of "no separateness" of any concepts, scientific or not.

The patriarchal Abraham in the Bible (spanning Christianity and Islamic beliefs) defined the One-God as the Unity underlying all of the natural world.

Judaism speaks of "..dealing with ultimate reality and fundamental problems of existence, we move into regions beyond the range of human observation, experiment and experience". This belief also has basic underlying tenets of "we are all connected" and that we are indeed a part of the natural order of Being: the basic universality of who we are.

The Great Sufi Master, Pir Vilayat Inayat Khan, devotes most of his book "Awakening" to the illumination of our Oneness with the Divine as a being of pure light. Khan includes the idea of the pendulum of consciousness and compares it to the ocean and the wave of time dynamics. Sufism is about "knowing" that all things operate as One.

In "Secrets of Hebrew Letters," ..letter sequence of B'reshit (the Hebrew text of Genesis), a text which underlies and is held in common by the spiritual traditions of the ancient world. This metaphor models embryonic growth and self-organization. It applies to all whole systems, including those as seemingly diverse as meditational practices and the mathematics fundamental to physics and cosmology." and "represent fundamental directions in a hyperdimensional space."

"By fusing mathematics and Jewish mysticism, Stan Tenen, a physicist, has demonstrated that the first verse of Genesis in the Hebrew Bible generates mathematical Torus". It goes on to say, "letter forms themselves have intrinsic geometric and mathematical properties that point us to a profound knowledge of life and the nature of human consciousness". (In some other cultures and ancient histories, Hebrew was

and is regarded as the Language of Light because of it's mathematical properties.)
(excerpts from the Atlantis Rising web site, see Links)

The Essenian philosophy speaks of "the spaces between, the silence between the pulses of creation" which relates to quanta, the small pulses of light that creates our reality of time. There must be a "pause" in between the pulses. This pause is the "NOW" moment. This "NOW" moment is the crux of the "Stalking The Wild Pendulum" by Itzhak Bentov.

"The momentary pause in every heartbeat is a link with the still centre of the Overself. Where the rhythm of activity comes to an end--be it a man's heart or an entire planet--its infinite and eternal cause is there. All this vast universal activity is but a function of the silent, still Void."
Brunton

Thich Nhat Hanh, a Buddhist scholar, relays the ongoing message with "things have molecules, atomic particles held by forces with empty space of perpetual moving energy..One is All, All is One".

"The Tao of Physics" is a book filled with incredible information regarding scientific concepts paired with consciousness in the practice of Buddhism and Hinduism. Some of the chapters in the book are: The Unity of All Things, Space-Time, Quark Symmetries and Interpenetration. In the last mentioned chapter Capra writes, "the universe is seen as a dynamic web of interrelated events..they all follow from the properties of the other parts and the overall consistency of their mutual interrelations determines the structure of the entire web."

An amazing parallel to the above statement can be found in Chief Seattle's wisdom of "Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect."

A grain of sand, a star, water drop or a person, a proton of a hydrogen molecule is the same regardless of form. The only difference is the way the materials are organized and their "consciousness" properties. According to Bohm's idea in the previous section, "conscious atomic sea..extending out from this sub-atomic reality, all of material creation may also be said to be conscious."

We, as stewards of Earth should be concerned with All living things...All things are living..All things are composed of energy. We are all connected at our most elemental and rudimentary levels. When we honor the physical things and become mindful of the unity in all things this imparts respects and honor to the Earth.

"The sooner we recognize our relationship with the world around us, the sooner we recognize our inner choice of peace mirrored as gentle weather patterns, the healing of our societies, and peace between nations."

Frequency

*"To know the mechanics of the wave is to know the entire secret of Nature."
Walter Russell*

The psychodynamics of the mind as an electromagnetic structure establishes the nature and reality of consciousness as an interdimensional energy process. It is an electrical process of cause and effect.

Consciousness determines our vibration (frequency and amplitude) When we realize that time and space are really ONE I think we then go beyond a simple understanding. This is what Einstein was talking about concerning frequency (time) and amplitude (energy)...and time traveling - and to me, this would mean being spiritually energized to walk in the 4th dimension freely. Physics states the 4th dimension exists (subsequently physicist say 10 dimensions exist that they have mathematically figured so far), we can thus apply it to other spiritual areas as in various mysticism practices.

When our energy-amplitude is raised higher it is synonymous with our frequency (time) getting higher. When our frequency raises the distance between the waves are closer, therefore shortening time considerably. So Time is the distance between two points. What your amplitude-energy is determines how efficient you travel that time line.

For instance, You are standing by me...you raise your energy, which raises your frequency [if you are efficient at it {efficient in science is least amount of work for the energy expended}]. You dart across the room and come back to standing by me. I do not see you - except for the transition period of your energy ..you coming and going. You might look like a fuzz of light at first..(dart across the room and come back) then a fuzz of light again. This is all that would be noticeable. Or perhaps if one is in movement while this energy transition is taking place, we may observe a "blurring" and see many different phases as in seen in someone taking consecutive pictures of a track and field long jumper. The realities are "blurred" together, and as physics states, can be seen in the multiple dimensions at once.

This parallels the concept of the Superstring theory which assumes there are an infinite and alternate series of parallel universes that exist. The viewpoint of many theoretical physicists: light is a vibration of the unseen 4th dimension. What is light? Light, electricity, and magnetism are manifestations of the same thing called electromagnetic radiation that encompasses the electromagnetic spectrum in which only a small fraction of light is visible to us.

When we do the "dart across the room" experiment, only the small visible light will be seen as a fraction of the whole energetic transition.

Music:

When we resonate as in the above example, it can also be viewed as "musical notes" that represents a mode of vibration, a distinct resonance or particle. Michio Kaku a physicist and author of "Hyperspace" states, "Matter is nothing but the harmonies created by this vibrating string..The laws of physics can be compared to the laws of harmony allowed on the string. The universe itself, composed of countless vibrating strings, would then be comparable to the a symphony."

"The energy of the heart, right down to our DNA is musical and rhythmic in nature. Geneticist, Susumu Ohno at the Beckman Research Institute of the City of Hope in Duarte, CA, has translated the 4 nucleotides on the strands of DNA.

When performed, listeners compared it to Bach, Brahms and Chopin. Listeners were moved to tears."

"The universe consists solely of waves of motion...There exists nothing other than vibration." relates Walter Russell in "A New Concept of the Universe". In vibratory physics, the principles that make sound into harmonious music are the same principles that govern all associating vibrations throughout the universe - and that includes everything that there is. Vibrations are dynamic things not unlike "living" things since they are in a mutual state of "harmony".

When sound harmonics form direct harmonic relations the two vibrating sounds and their chords of vibration are said to be sympathetic to each other. In other words, resonance - like attracts like. This combined frequency dictates that what happens to one vibratorily happens to the other simultaneously in varying degrees of harmony or dissonance. This is the Law of Cycles as presented by John W. Keely's "Law of Sympathetic Vibratory Physics".

"Music is formless and is therefore the perfect expression of the formless."
Innayat Khan

Musical notes or sounds can be converted numerically as in the example in the previous section regarding the Fibonacci numbers found in nature. According to mathematics principles, a series of vibrations will multiply many times its own pitch, thus increasing harmonically all those that are near. This is the Law of Harmonic Pitch.

This multiplication of frequency and amplitudes is thought of in relation to the Ascension process. All things are energy, thus our "energy bodies" are becoming more attuned, reaching a higher vibrational rate, to the dynamic energetic force of the Universe. Extending and expanding vibrational rates happens in nature and we are merely a part of nature, so we should too, in theory, be capable of "ascension" as dense physical material beings.

Sound:

"He made the whole world an instrument of sound, and an instrument for carrying messages, resounding praise to the Creator of all."
Frank Waters - *The Book of the Hopi*

There is something called the Sacred Sound Current which correlates to the spiritual Hindu "OM" and the Sufi "HU", and the Sant Mat "Shabd". This Music of the Spheres, Logos or Word as called in mystical teachings, goes beyond our limited spoken language. Such ethereal music is referred to also as the Sound of God or the Breath of God since the sound permeates all things. And as we know, all things are composed of energy.

This all pervading sound in the current of the Ocean of Consciousness is believed to be the connecting link between God and man. The divine currents are always playing a symphony of ethereal music, however, it does not become audible until we have progressed spiritually enough to hear with the inner ear. Additionally, many mystics, ancient and modern, have reported seeing various colors with the inner eye(s) while in meditation.

As physics deems, all is in a vibrational state, and thus can be converted into mathematical renditions, musical notes and color frequencies. Shabd is believed to be the pinnacle point of all the powers of nature in which, according to scriptures, is the method in which God creates.

"I dwell in undefiled Light and a Thought revealed itself perceptibly through the great Sound...And it is a Word by virtue of the Sound; it was sent to illumine those who dwell in darkness...I am a Light that illuminates the All. I am the Light..."

Trimorphic Protennoia - Nag Hammadi

Light and Sound is also viewed as synonymous with each other in the ancient scriptures. This has been mentioned in various contexts within this site as well. They are Interconnected and part of the Whole within the wave/particle duality.

We can parallel the holographic universe concept with what Philo of Alexandria's wrote circa 40 CE, "The whole creation, this entire world perceived by our senses is a copy of the Divine Image...But the shadow of God is his Word which he used like an instrument when he was making the world. And this shadow, and, as it were, model, is the archetype of other things.." We can also note the similarity to Carl Jung's archetypes within the collective unconscious.

"The musician is very close to mysticism, far closer than the philosopher...because music is meaningful without any words; it is meaningful simply because it rings some bells in your heart..creates a synchronicity between you and itself, when your heart starts resonating in the same way, when you start pulsating in the same way."

Osho, Philosophia Ultima

Frequency:

There are known quantitative frequencies that have been measured that illustrate the body and energy connections with comparative measurements to the world around us:

note: ^ = means to the power of 10^-8, 10 the minus 8 power

Gamma Rays	10 ¹⁸ to 10 ²⁶ hz
X rays	10 ¹⁶ to 10 ²⁰ hz
Ultraviolet Light (UV)	10 ¹⁵ to 10 ¹⁷ hz
Visible Light	10 ^{4.7} to 10 ¹⁵ hz
Infrared Rays	10 ¹¹ to 10 ^{4.7} hz
Radar Waves	10 ^{9.5} to 10 ^{11.5} hz
Microwaves	10 ⁸ to 10 ^{9.5} hz
Television Waves	10 ⁶ to 10 ⁸ hz
Radio Waves	10 ¹ to 10 ^{6.5} hz
Elf Waves	10 ¹ hz

Earths Ionosphere Cavity Resonance - Schuman Field ranges from 1 Hz to 30 Hz - Radiation Spectrum

Audio20	20,000 Hz
	20,000 Hz - 100-

Ultrasonic	kHz - 10 MHz
Radiofrequency	150KHz-1.5 MHz
High Radio Frequency RF	1.5MHz-40 MHz
Very High Radio Frequency VHF	40MHz-100MHz
Ultrahigh Radio Frequency UH	over 100MHz

Brain:

Alpha	8-13 cycles/sec - relaxed alert
Beta	14-30 -intense mental concentration, agitation
Theta	4-7 Hypnogogic
Delta	5-3.5 Sleeping

Human Tolerances to sinusodal vibration

Head Pain	13-30Hz
Impaired Speech	13-20Hz
Jaw Pain	6-8Hz
Chest Pain	5-7Hz
Abdominal Pain	4.5 - 10 Hz
Human Body Cell	1,520,000 to 9,460,000 Hz
Upper Limit of Human Hearing	15,000 Hz

Molds, viruses, bacteria, worms, mites range from 77 KHz to 900KHz

Warts	400-430Kz
Tapeworms	420-450Khz
Mites	640KHz - 850KHz
Ant	1000 to 1200KHz
Goldfish	900 to 1500Khz
Chameleon	1000 to 6000KHz
Cat	1500 to 8000Khz

"Biological systems are influenced by the terrestrial electrical environment. This environment includes electric fields, magnetic fields, field modulations, and aerion(positive and negative) concentrations, and biological waves. Nature ordains harmonious variations of these factors. The human organism exhibits revealing electrical characteristics.

Electromagnetic brain waves (0.1 to 30hz) occur at frequencies paralleling those of terrestrial sferics and the Schuman resonance. Decision making abilities are subordinate to alpha, beta, gamma(.01-5hz), theta(4 - 7hz), and delta(0.1-4hz) brain rhythms with their related states of consciousness."
Symposium on Biological Effects and Measurement of Biofrequency/Microwaves, Department of Health, Education, and Welfare, FDA - Critical Aspects of Human Versus Terrestrial Electromagnetic Symbiosis, E. Stanton Maxey, M.D. , 1977

Duality:

As we have learned thus far, all life, coexisting together at the same time, is both matter and space: movement and stillness, sound and silence, light and darkness. As we have seen earlier, the wave/particle duality (Non-Locality) means that everything is joined or connected together. This duality also means that objects that appear to have seemingly opposite properties are of the same substance but in a different form or density of a vibrational level.

It is believed that Earth in what is deemed as a "free will zone"..the ongoing battle between the positive and negative forces, the dark vs. light. Scientifically speaking, there is no difference, just differences in frequencies and amplitudes. Simplistically speaking, we are all one.

"light and shade, long and short, black and white, can only be experienced in relation to each other; light is not independent of shade, nor black of white. There are no opposites, only relationships."
Lankavatara Sutra From "Buddha Speaks"
Anne Bancroft 2000

Another example of this polarity principle is found in sound harmonics. Fields may be enharmonic on one level but harmonic on different levels. Enharmonic would be like plucking a guitar string and allowing it to vibrate freely. The sound and the frequencies of the corresponding vibration are no longer exactly in the same frequency ratio. Harmonics, is the vibration multiples of the same frequency.

The Taoists also viewed the dynamic interplay between the polar opposites as yin and yang. This pair of opposites share a polar relationship where the two poles are dynamically linked to the other and found throughout nature.

This idea of implicit unity of all opposites can be extremely difficult to accept. However paradoxical it may seem to some, Eastern philosophies have always been considered this as essential for attaining enlightenment to go 'beyond earthly opposites,' and in China the polar relationship of all opposites lies at the very basis of Taoist thought. In the Tao of Physics, "Thus Chuang Tzu says, The "this" is also "that." The "that" is also "this." . . . That the "that" and the "this" cease to be opposites is the very essence of Tao. Only this essence, an axis as it were, is the center of the circle responding to the endless changes."

This ancient wisdom of duality is the essence of the Tao. It also appears to be the essence of physics.

*"Every explicit duality is an implicit unity."
Alan Watts*

Heraclitus the Greek philosopher also realized that all opposites have a unity and relativity. "The way up and down is one and the same," and "God is day night, winter summer, war peace, satiety hunger."

Science and religion also represent a complimentary pair of polar opposites residing within a highly complex paradox. If we view these opposites as the ends of the light spectrum, we have a diverse range of human culture and ideals. These cultural dimensions in this range quantify the ideal of "unity of diversity", biologically, ecologically and sociologically. In "The Wisdom of Thich Nhat Hanh", he eloquently says, "Realizing the interdependent nature of dust, flowers, humans, we see that unity cannot exist without diversity. Unity and diversity interpenetrate each other fully."

The full magnitude of the paradox disappears in the light of diverse duality.

*"Life starts with the knowledge of diversity, but the awareness of unity is the
pinnacle of life."
Hazrat Inayat Khan*

The Kybalion:

The Kybalion encompasses the study of "The Hermetic Philosophy of Ancient Egypt and Greece". This is considered as the life work of Hermes Trismegistus who was considered to be the "scribe of the gods". This Greco-Egyptian philosopher and mathematician reportedly had written tens of thousands of volumes of books revealing to humankind the healing arts, magic, writing, astrology, science, chemistry and philosophy. This was a time of unity between the scientific and religious studies.

Hermes also built several pyramids and reportedly even taught the great mathematician Pythagoras. Oddly enough, Hermes is considered the "Great Central Sun of Occultism". Perhaps Hermes was the living embodiment of duality as he inscribed some of the earliest accounts of the secret of the ultimate reconciliation between the meta-physical science and religion. His wisdom follows in excerpts from the Kybalion. The parallels to "modern" thinking are astounding.

"Everything is Dual; everything has poles; everything has its pair of opposites; like and unlike are the same; opposites are identical in nature, but different in degree; extremes meet; all truths are but half-truths; all paradoxes may be reconciled."

"The same Principle manifests in the case of "Light and Darkness," which are the same thing, the difference consisting of varying degrees between the two poles of the phenomena"

"The "Art of Polarization becomes a phase of "Mental Alchemy" known and practiced by the ancient and modern Hermetic Masters. An understanding of the Principle will enable one to change his own Polarity, as well as that of others, if he will devote the time and study necessary to master the art."

"The teachers claim that illustrations of this Principle may be had on every hand, and from an examination into the real nature of anything. They begin by showing that Spirit and Matter

are but the two poles of the same thing, the intermediate planes being merely degrees of vibration. They show that THE ALL and The Many are the same, the difference being merely a matter of degree of Mental Manifestation. "

By looking carefully at the nature of opposites, we might realize that each pole actually incorporates its opposite, in one form or another - as an essential component of the whole.

*"To understand the whole it is necessary to understand the parts. To understand the parts, it is necessary to understand the whole. Such is the circle of understanding."
Ken Wilber, Eye of Spirit*

Shamanism

"I see science and mysticism as two complementary manifestations of the human mind; of its rational and intuitive faculties."

Fritjof Capra - Tao of Physics.

"Shamanism" is basically the practise of contacting the "spirit world" and doing work on the dimensional and/or on a soul level. This could encompass many methods and modes of doing such. Shamans/Healers have been the corner stone of many spiritual traditions throughout the world. The roots of these ancient Healers and Priests regarded the soul and consciousness as a part of the whole cosmos. The shamanistic concept of "journeying" could be explained by as traveling through space and time dimensions to heal the soul and the person or many various other reasons depending on the culture of that healer. For many healer/shamans multidimensional traveling is a way of life. There is no distinct separation.

Science has also come to explain how "magic" of the shamans operates to some degree. A scandalous trial in London in 1877, grabbed the attention of many notable physicists. Henry Slade, a psychic from the United States, was charged with fraudulent activity. What marked this normally mundane trial of trickery is that physicists and astronomers around the world, some who won the Nobel Prize in physics, came to Slade's defense. These scientists claimed "miraculous feats" could be done by manipulating objects in the 4th dimension.

This other worldly ability is something shamans have been to known to do, either alter something in the physical or manifest something from "thin air". Physicists are coming close to explaining the science of the shaman.

Eventually, Henry Slade was convicted despite the help he received.

The well known tenet in shamanism is the "axis mundi", the transcendental center of the worlds, designates "parallel world realities within a single universe", coexisting on each side of the "axis mundi" the axis by which our world is brought into communication with the upper and lower worlds.

In "The Nature of Shamanism" it states, "Uniformities of forms do appear to exist in our empirical universe which transgress the quanta of the human mind...falling into the domain of the Jungian 'collective unconsciousness'".

"By invoking modern physics, we can say, together with many a shaman, that all reality is only a continuum of the same spectrum. Put otherwise, reality is always in a state of Being or Existing."

"Magic is any sufficiently advanced technology."

Arthur C. Clarke

Light:

The generally accepted theory of light up until the mid 1800's, was Newton's assertion of light to be a stream of tiny particles. However, in the late 1800's, the particle picture was replaced by the wave theory of light due to the phenomena associated with light: refraction, diffraction and interference, which could only be explained using the wave picture.

This electromagnetic radiation, or light, may be viewed in one of two complementary ways: as a wave in an abstract electromagnetic field, or as a stream of massless particles called photons. This is known as the wave - particle duality and is true for all particles. This duality is the basis of a indisputable quantum law in which it is a thread that runs throughout the micro and macrocosm.

Light as a wave, has a wavelength associated with it, much like an ocean wave with crests and troughs. The frequency of light is measured by counting the number of waves passing one point at a given time. The energy is merely the strength or force the wave carries.

Since all things have an energetic duality we can convert and apply this to the DNA and RNA molecules which they in fact emit their own light/energy. Science shows this and mystics spanning many beliefs and philosophies throughout history speak of this wisdom in terms of The Language of Light.

Enoch the patriarch of the Bible speaks of this language of light as waveform geometries of harmonic resonance that mimic the properties of light. The Enochian knowledge describes sonic equations, encoded within the ancient mantras and god names, capable of directly affecting the nervous system and producing profound effects of healing and higher consciousness states.

The Divine Light and Kingdom of Light references can be found in the Dead Sea Scrolls, the Nag Hammadi, Pistis Sophia and among the various other Egyptian, Persian and Syrian writings. The returning to the light from which we came, this merging of the light withing ourselves with the Divine, is what the great Eastern Orthodox mystics called, Theosis, others call it Christ Consciousness, Nirvana, Bliss, Oneness, and Enlightenment.

The renowned yogi, Yogananda describes the universe beyond matter as being composed of indescribably subtle Light and that the material universe is composed of all the same essence. In describing a state of ecstatic joy he says, "A swelling glory within me began to envelop towns, continents, the earth, solar and stellar systems, tenuous nebulae, and floating universes...The entire cosmos...glittered within the infinitude of my being." According to yoga principles this is called Oneness with Supreme Consciousness, Ultimate Being, or God. In modern physics, this could be described as Non-Locality in the atomic sea.

The yogic science, practiced within the laboratory of human consciousness, is, in fact, the science of consciousness, which physicists such as Bohm theorize as being inseparable from, and responsible for, all reality.

Kabir Das, one of the medieval Indian saints whose compositions figure in Sikh Scripture said: "The Light of one soul is equal to that of sixteen suns." Many of his writings speak of the brilliance of Light and touches on the simplistic fundamental roots of Oneness.

The more we raise our vibrational levels, the more of this language we 'speak'. This language also carries over into stones/minerals/herbs for they have their own inherent vibrational rate. The same applies to the sacred symbols and sounds found throughout the world. Since everything in the universe emits energy we are harmonizing ourselves into resonating with the universe around us.

In some circles, multidimensional beings are called Light Beings. Also, sometimes people call themselves Light Workers, for their work with and operation out of / from the Light which is synonymous with "All That Is In The Universe". As we progress spiritually we become vibrationally altered or become "light bodied". Thus we have the aptly named physical ascension. "Light Knowledge" is also deemed the knowledge of God that seems to be a universal truth throughout the belief systems of the world. In several ancient writings Light is synonymous and equal to the dimensions and levels of

Love. The differences in electromagnetic light can also be paralleled to the differences and levels of Love. Ultimately, Light is Love and all operates as One.

It is beautifully ironic that the duality of light properties seem to unlock a vast door to scientific universal principles in which the mystics and shamans have always understood.

Synchronicity:

Carl Jung made significant progress in his theories of the soul and shamanism, on many levels. This psychologist's work on the deep aspects of the soul dawned a new age for scientific and religious thinkers. Carl Jung's depth in understanding the self and realms therein parallels the knowledge and characteristics of shamanism.

With this understanding, Carl Jung felt that no causal connection can be demonstrated between two events, but a meaningful relationship nevertheless exists between them. This direct encounter with the patterning of events in nature as a whole reveals the meaningful connections between the subjective and objective world. Jung called this principle of meaningful coincidences: "synchronicity".

Jung describes in his research into the collective unconscious that coincidences were connected in meaningful ways. Their occurrence seemed to defy the calculations of probability. Because Jung believed the phenomenon of synchronicity was connected to psychic conditions, he felt the inner and outer realities (subjective and objective) evolved through the archetypes. Jung formulated that these archetypal images belonged to a part of the unconscious not derived from personal experience. The archetypal images forms the "collective unconscious". This collective is all things working in tandem indicating 'singleness of purpose', in this case, our very totality of consciousness vibrating and working as one coherent mass of energy.

We can also see archetypal images or symbols as energetic structures that create a bridge between us and the higher realities. In some unintelligible way, they connect us with the spiritual realms and the divine order that unites us all. Archetypes thus become a doorway that provides access to the experience of meaningful coincidence.

Jung's concept of synchronicity speaks of the "oneness" and interdependence of the universe. Jung states, "peculiar interdependence of objective elements among themselves as well as with the subjective (psychic) states of the observer or observers". Jung was also heavily influenced by the "new" physics dawning which he wrote, "Physics has demonstrated...that in the realm of atomic magnitudes objective reality presupposes an observer, and that only on this condition is a satisfactory scheme of explanation possible...This means that a subjective element attaches to the physicist's world picture, and secondly that a connection necessarily exists between the psyche to be explained and the objective space-time continuum."

These discoveries confirmed what Jung recognized intuitively: that matter and consciousness are, in fact, interconnected in an essential way. Quantum theory and synchronous events along with matter and consciousness function as complementary aspects of a unified total reality.

In an essay by Gerhard Adler titled "Reflections on "Chance" and "Fate" - "This interconnectedness manifests itself in so many ways that one has to accept it as undisputable reality."

Arthur Koestler, a twentieth century philosopher, refers to the capacity of the human psyche to "act as a cosmic resonator" and in his book, "The Roots of Coincidence", presumes the "fundamental unity of all

things," which transcends mechanical causality, and which relates coincidence to the "universal scheme of things."

Koestler also refers to "the universal hanging-together of things, their embeddedness in a universal matrix." Many ecologists and scientists know without a doubt, this sense of interrelation in and of the world.

The mystical concepts of one universal scheme parallels the scientific theme of oneness. The relevancy of science and consciousness is immense.

*"Call it Nature, Fate, Fortune; all these are names of the one and selfsame
God."
Lucius Annaeus Seneca 5 BC-65 AD*

Ascension

*"Spiritual attunement is attuning oneself to a higher pitch."
Hazrat Inayat Khan*

Ascension simply means to rise up. An ascension experience is a period of time in which you material body raise to a higher state. It is nothing new as others throughout time have experienced, perhaps what is new about 'this time' is that it is happening to people 'en mass' contributing to a greater spiritual awakening of consciousness. Again, one group of a highly energetic body has a tendency to raise all those in the vicinity. Our physical body is actually becoming a different frequency (component of) light as we go from a more material body to a more refined light body. This is a physics principles in action.

The Ascension places you in the midst of universal secrets hidden from veiled eyes thus the more important your wisdom and power become.

As we become more interdimensional and multidimensional "the frequencies alter and the energies accelerate, your body goes through a drastic rapid change that the nervous system must handle".

Some signs and symptoms reported are: rejuvenated organs, hot/cold flashes, massive dizziness, change of diet, excessive tiredness, skin, hair and eyes changing, increase of aches and pains, increased psychic and kundalini activity etc. Many have read and/or experienced such (and continue to do so).

Ascension appears to be a biological reality; there's an evolution of species occurring on this planet, as well as an evolution of consciousness. Many sensitive and attuned individuals feel and see the change happening within them it and subsequently receive the same Spirit messages from the cosmic grid of consciousness, or as Jung termed it the "collective unconscious".

This metamorphosis includes very specific biological and biochemical changes in your DNA, cells, blood, endocrine system and brain also thus affecting the energy of the body throughout the dimensional planes. These changes are all taking place on a subatomic molecular level.

Dr. Berrenda Fox provides evidence of DNA and cellular changes and has given "ample" proof through blood tests that some people have actually developed new strands of DNA. Mutations and molecular changes are happening. I hope more of the scientific community comes forward with their findings to substantiate the information that is there.

Harmonic Convergences:

We've also all heard in spiritual circles of the harmonic convergences and light grid activations, "time for the consciousness of mankind to make a quantum shift to the next level of experience". These shifts and activations are merely the harmonizing of those atomic pieces that make up the whole. The cosmic ocean, as its called throughout the world, generates cosmic waves of energy. The ocean consisting of our thoughts, feelings, emotions and intents, love, hate, anger etc. ride upon and make up, these waves, which in one way can be compared to the 'quantum foam'. The "Harmonic Convergence" is just not a new age trekkie term for the fun of merely saying it because it sounds cool. It is a real *quantum* event. We cannot discount that this is really happening on a level we can't physically-visibly see. According to physics principles, this affects every other single organism in the universe and on earth.

"..dropping polarity - no longer thinking in terms of good or bad, but seeing the

wholeness and completion and perfection of life. It is a very definite mind, emotional and body response. The body response is the one where your body simply does not acknowledge good or bad, but sees that there is a higher purpose behind it all."
Drunvalo Melchizedek on dna changes and activation

We must remember our true multidimensional nature so "we" can merge into the multidimensional consciousness that is our innate heritage. All of the dimensions are ever present and functioning in and/or through our physical bodies and throughout the entire universe. Due to our dense vibrational rate (right now) we are not aware of them until we somehow remember and recall our multidimensional awareness.

DNA:

"UC Davis experts on basic DNA research Since 1953, DNA research has had an impact on everything from biology, agriculture and medicine to criminal law and justice, art and politics." DNA structure is more than a double helix. "The famous double helix is actually supported by many different proteins that allow it to be read, copied and repaired. Working out what those proteins are and how they work together is the aim of the Center for Genetics and Development, led by Stephen Kowalczykowski, professor of microbiology and molecular cell biology. Kowalczykowski's own laboratory studies the family of proteins that allow DNA strands to cross over and recombine, creating genetic variation."

The 3 billion base pairs in the human genome are organized into 24 distinct, physically separate microscopic units called chromosomes. The total genetic information, within these structures, is a sequence of over 6 billion base pairs or 12 billion "letters." That makes up only 3% of what is known, another 97% remains unknown to conventional science.

We can apply the concept of frequency and vibration to the body and its cells as physics dictates. We can also study the body and its building blocks and infer the same information applies to DNA.

As in the previously mentioned Fibonacci numbers, DNA and the body can be converted to mathematical physio-musical signals as well. Professor Susumu Ohno of the Beckman Research Institute of the City of Hope, proposed years ago that the repetition process governs both the musical composition and the DNA sequence construction. The body creates music through brain waves, the heartbeat, blood circulation, endocrine cycles, right up to the microwave level of organ vibration. DNA is the "orchestrator" of this music.

Molecular biologists have defined 20 proteins in the body which they have been able to look at music and read the exact sequence of bases in the DNA. One part of the DNA structure when "played" from the sequences sounds like a waltz melody, another sounds similar to an Irish jig, with a definite beginning, a middle, and an end. Oddly enough, the base sequence T-T-T-C-C-C-C-C-C-, when played, are the famous opening notes of Beethoven's Fifth Symphony.

And you may have noticed upon entering into this web site, the music is based up on the major protein of DNA for "spider dragline silk" and is a natural protein polymer in the development of Biomimetic fiber manufacturing. I liked the melody of the music and wanted to demonstrate the mathematical connection to DNA, albeit through spider genes.

"It (the music) is produced from the primary and secondary structure of protein sequences...pitch is determined by amino acid identity and instrumentation is chosen according to protein folding pattern, with different instruments representing regions of alpha-helix, beta-strands and turns."

*"..the fundamental point that it is not that everything that exists has fields of vibrations, but that everything that exists is fields of vibrations."
Kevin Farrow - The Energy Fields.*

Thought

"We are what we think. All that we are arises with our thoughts. With our thoughts, we make our world."

Buddha

Thought is a great dynamic force with tremendous power. An simple atom radiates an electromagnetic field or EMF. A molecule radiates yet a stronger EMF. A large number of molecules form a cell in which the human brain contains at least 200 million such cells. These atomic waves seem to include the emotions and are thought to be superimposed within the EMF frequencies. These vibrations are sent out into the physical world extending outward into the "non-physical" world. The historian Arthur Koestler refers to this as the capacity of the human psyche to "act as a cosmic resonator". Thoughts paired with Intent equals a very powerful mixture of "mental stuff".

Thoughts and emotions happen as a result of you interactions with the world based on your perception of past experiences. It how you perceive this world of events that form our thought processes that become reactions and behaviors, unconsciously or consciously. Your thoughts create your feelings, emotions, behavior and what you attract and magnetize into your life.

In minding your thoughts, there is also a Japanese principle known as the "Kototama Principle" meaning "word soul". When one develops the right connection to language and words, this deep connection "becomes a 'mirror' against which one reflects his concerns in order to have a better sense of their nature, place, and relationship to a totality." This "hidden" philosophy is just now re-emerging as our understanding how thought and feelings affect our realities.

Emotion is the fuel of creation..... "everything you dwell upon in your mind and heart, everything that you believe in, is drawn into physical manifestation. This is happening more and more quickly. As the masters have advised you for thousands of years"...

The very fabric of space/time that makes up the world is composed of threads and we can/are collectively changing it and bending it to the will of a love-centered reality. Not only an emotion, Love is a genuine power in and of itself. The world isn't set in "physical laws" or "immutable constants" it is ever changing, every fluctuating and we do change that with the tiniest thought.

"Thank goodness for feelings that create our emotions. Feeling and emotion are what will ignite your desire to know the love that is within you."

Alana, The Seven Sacred Steps

The Brain

"The human brain being formed of an inestimable number of spherical resonators, termed in medical science nerve cells, forming the gray matter of the brain, these minute spheres take up the thought force which permeates all space in endless waves, eternally active. This force we term atomolic; the cells are composed of *atomoles, whose vibratory motions under the action of universal thought force result in the phenomena of thought, cognition, intellection, etc. Understanding this, no one should continue to feel surprise at the caring emotions and impulses of a human being in an undeveloped state, as only by developed WILL can the motions of this force be directed."

(*Atomoles are elementary units of matter uniform in size and weight, and exist in solid, liquid, gaseous, and isolated forms. "Keely and His Discoveries" by John Ernst Worrell Keely)

A physics theory that was predicted in 1925, that resulted in the ever popular example of superconductivity in 1995, is The Bose-Einstein condensation.

This condensation is viewed as the most highly ordered structures in nature. This property is equivalent to a laser but the particles behave as a single particle and seem to possess a form of free will. The energies merge to become part of the whole. The Bose-Einstein condensate was later applied to living tissues and the results were astonishing for quantifying human consciousness.

In 1989 the British psychiatrist Ian Marshall, showed whenever the condensate in the brain is excited by an electrical field, conscious experience occurs. In his studies, the millions of neurons in the brain would maintain coherent thought processes, the neurons working as one structure. In other studies, it has also been determined by the encephalograph that all reasoning processes are actual waveform transmissions. Additionally, quantum wave function of the brain is not completely random and seems to have a "phase difference" which implies the parallels of mind and body to the duality of the wave and particle. The wave aspect of nature yields the mental, the particle aspect of nature yields the material.

Nobel Prize winner Ilya Prigione of the University of Texas is studying the "spontaneous formation of coherent structures," how chemical and other kinds of structures evolve patterns out of chaos. Karl Pribram, a neuroscientist at Stanford University, has proposed that the brain may be a type of "hologram". He theorizes the brain is a pattern and frequency analyzer which creates reality by interpreting frequencies from beyond space and time dimensions. On the basis of this model, the physical world "out there," is, in Pribram's words, "isomorphic with"--that, the same as, the processes of the brain.

Again, referencing to the physicist David Bohm, he writes, "in the deep structure of the brain. The new meaning will produce different thoughts, and therefore an entirely different function of the brain...As this changes, the whole universe changes."

"Our destiny changes with our thought; we shall become what we wish to become, do what we wish to do, when our habitual thought corresponds with our desire."

Orison S. Marder

In a New York Times article dated April 26th, 2003, Tenzin Gyatso of Dharamsala, India, wrote a column about his recent investigation of emotions and behavior. This being a recent publication of the science of the emotions and the mind in Buddhism, in which many such similar scientific studies have been done.

"It is for this reason that I visited the neuroscience laboratory of Dr. Richard Davidson at the University of Wisconsin. Using imaging devices that show what occurs in the brain during meditation, Dr. Davidson has been able to study the effects of Buddhist practices for cultivating compassion, equanimity or mindfulness. For centuries Buddhists have believed that pursuing such practices seems to make people calmer, happier and more loving. At the same time they are less and less prone to destructive emotions.

Dr. Davidson tells me that the emergence of positive emotions may be due to this: Mindfulness meditation strengthens the neurological circuits that calm a part of the brain that acts as a trigger for fear and anger. This raises the possibility that we have a way to create a kind of buffer between the brain's violent impulses and our actions.

Dr. Davidson using electroencephalographs to measure brain waves. According to Dr. Davidson, the abbot had the highest amount of activity in the brain centers associated with positive emotions that had ever been measured by his laboratory. After eight weeks, Dr. Davidson found that in these people, the

parts of their brains that help to form positive emotions became increasingly active.

But reflection shows that in our lives much of our suffering is caused not by external causes but by such internal events as the arising of disturbing emotions. The best antidote to this disruption is enhancing our ability to handle these emotions."

Laughter:

We have all heard that laughter is the best medicine. The emotions that come from humor and laughter help people cope better with the stress of daily life. Studies have shown that people who laugh often live longer and are much healthier compared to those that find it difficult to laugh due to life's circumstances and personality types. This common reflex affects the body by activating the cardiovascular system, helps lower blood pressure and also exercises the muscles of the body. Research has shown that parts of the limbic system are involved in laughter as well. The limbic system is a primitive part of the brain that is involved in emotions and helps us with basic functions necessary for survival.

Dr. Lee S. Berk, at Loma Linda University School of Medicine and Public Health in California, and endocrinologist Stanley Tan, studied various groups of adults and found that laughter also stimulates our endocrine system and the pituitary gland, which in turn, stimulates release of endorphins and enkephalins, natural painkillers that are chemical cousins to opiates such as morphine and heroin. They found that both arms of the immune system got a boost out of laughter. Other studies have shown laughter improved functioning in those with breast cancer, marital stress and also those in the grieving process.

Silvia Cardoso, a behavioral biologist reports, "Repeated short, strong contractions of the chest muscles, diaphragm and abdomen increase blood flow into our internal organs, and forced respiration--the ha! ha!--makes sure that this blood is well oxygenated. Muscle tension decreases, and indeed we may temporarily lose control of our limbs, as in the expression "weak with laughter". It may also release brain endorphins, reducing sensitivity to pain and boosting endurance and pleasurable sensations. Some studies suggest that laughter affects the immune system by reducing the production of hormones associated with stress, and that when you laugh the immune system produces more T-cells."

Recent surveys indicate that laughter can enhance the quality of our conversations and productivity and social interactions. It simply makes people feel closer to each other. In his book, "Laughter: A Scientific Investigation", Provine says "that laughter is the oil in the social machine, helping human interactions run more smoothly".

Laughter sounds also have on emotional responses in listeners. Recent studies "support the notion that one important function of laugh acoustics is to influence the emotional responses of listeners," the researchers from the Acoustic Society of America meeting conclude.

I had stated in the Frequency and Sound portion of this site, "The universe consists solely of waves of motion...There exists nothing other than vibration." relates Walter Russell in "A New Concept of the Universe". In vibratory physics, the principles that make sound into harmonious music are the same principles that govern all associating vibrations throughout the universe - and that includes everything that there is. Vibrations are dynamic things not unlike "living" things since they are in a mutual state of "harmony".

Biology:

"David Bohm summarizes $M=E=I$ formula (matter = energy = information) when he writes: 'there is a limitless amount of information enfolded into the structure of the universe and we are a manifestation of that energy. Every body event, whether the workings of enzymes, neuropeptides, hormones, blood, or skin, is an info-energetic event.'"

"Science has discovered startling new possibilities regarding how we think, feel, love, heal and find meaning in our life...research suggests that the heart thinks, cells remember and that both of these processes are related to an as yet mysterious, extremely powerful, but very subtle energy. Science may be taking the first steps to understanding more about the ancient shamans/healers/leaders - the energy of the human spirit and the coded information that is the human soul."

Many cardiologists have combined their knowledge of biology and new physics - the study of subtle energy and the invisible atomic world and modern cardiology. Energy cardiology is based on the "dynamic systems memory theory", the idea that all systems are constantly exchanging mutually influential energy, which contains information that alters the systems taking part in the exchange. From the "Heart's Code" web site, "Our billions of heart cells are able to form a quantum energy generator...by laws of the quantum world such as nonlocality...the info-energetic connection that constitutes all systems in the Universe."

Kinesiology

Another field, Kinesiology, has made strides in determining feelings and emotions on the well-being of the body. David R. Hawkins, MD, PhD. conducted a 29 year study that demonstrated the human body becomes stronger or weaker depending on a person's mental state using kinesiology, or muscle testing. Dr. Hawkins developed a scale of 1-1000 that maps human consciousness: 200 (or 20,000 cycles per second) weakens the body and from 200 to 1000 makes the body stronger. At various points above this are intellect, psychology, science, genius, heart and enlightenment which moves us from duality to non-duality. This Map of Consciousness is based on a logarithmic scale which means there is an enormous increase in power with even a small increase in the number on the scale.

The lowest vibration rate is described as "Force". This exhibits a weak kinesiological response with a vibration under 200 which includes shame, then guilt, apathy, grief, fear and anxiety, craving, anger and hate. All these feelings weaken you. Levels at 200 and above are described as "Power," which elicit a strong kinesiological response. At 250 you have neutrality and trust - this strengthens you.

Going up on the scale there is: willingness, optimism, acceptance and forgiveness, reason and understanding, love and reverence, joy and serenity.

Courage calibrates at 200

Willingness calibrates at 310

Reason calibrates at 400

Unconditional Love calibrates at 500

Joy, and the ability to communicate healing energies to another calibrates at 540

Gratitude calibrates at 560

Praise at 570

Peace and bliss is rated at 600

Enlightenment and Ineffability at 700-1000.

Dr. Hawkins conjectures the great scientists such as Newton and Freud calibrate at 499 and Carl Jung calibrates at 540, the highest level of the intellect we have known to this point.

At the highest end of the kinesiological scale of human experience, 600 to 1000, are qualities that transcend duality. This is the level of "enlightenment" and "pure bliss" of consciousness.

The highest calibration in this study was 700 by Mother Theresa who exuded peace and joy by her mere presence. Dr. Hawkins reports that Jesus, Krishna, Buddha, the greatest prophets recorded in human history all calibrate at a scale at 1000 along with their messages of Unity, Peace and Love calibrated near 1000.

Cycles Conversion of Hawkin's scale illustrate:

Hawkin's Scale	Cycles P/Second = Hz	kHz or kc/s
100	10,000	10
200	20,000	20
300	30,000	30
500	50,000	50
1,000	100,000	100

Please reference the section on Frequency which has a listing of comparative measurements

The frequencies from light, sound, to physiological functions (as demonstrated in the Frequency section) along with bio-scientific studies show definite resonances in all things and ultimately shows the dual nature of our physical being and how we are energetically linked to everything else.

"Energy waves build the human body by radiation in intrauterine life, as a pattern of energy currents, and continue to maintain it by this energy flow as wireless currents."

Dr. Randolph Stone -Polarity Therapy Book 1

Prayer

To "feel" combines our emotions merged with our thoughts - energy follows attention. When we pray we realize and acknowledge there are many possibilities and by the act of praying-focusing-feeling, we direct that energy into an opportunity that we *choose* to experience - of all the possibilities available.

A Tibetan abbott said on prayer, "Feeling - the object of each prayer is to achieve "feeling". When we pray, we feel on behalf of all beings, everywhere. We are all connected. We are all expressions of one life. No matter where we are, our prayers are heard by all. We are all the same one."

"Unless you, yourself, enter the image and think from it, it is incapable of birth."
Neville

Gregg Braden and others have spoken about the power of prayer and the physics principles at work. "Through the language of time waves, quantum outcomes, and choice points.." we determine our future probabilities. "Our individual choices merge into our collective response to the present" whose rings span far into the depths of time/space."

The matrix grid of consciousness, Jung's collective unconscious, is the nervous system for the earth, our thoughts effect this system and everything contained therein.

The universe can be crafted with a simple working of your will. Mages and mystics and shamanic healers have taught this truth throughout the ages. Thoughts and feelings manifest itself into reality. This makes us co-creators with the universe. Quantum physics even suggest that by redirecting our focus and our attentions we can bring a new course of events into action.

"Everything we think, feel, and do has an effect on our ancestors and all future generations and reverberates throughout the universe."

Thich Nhat Hanh

A tiny emotion becomes a thought of a one raindrop, thousands of drops turn into a flood. There is true magic-alchemy in the power of will, we shape the world by our desires, thoughts, intents and actions. So in relation to mankind's "ascension" it is the product of many working, thinking, acting, and living as a higher unit of collective thought energy processes.

Kabalistic teachings there's a saying, "think well of everyone". In Kabbalah, what we do in this world always has effects in the spiritual dimension. There is also the term "cycle of reciprocity": what is going out from your mind is always coming back to you.

Dhyani Ywahoo, a Cherokee spiritual teacher, says it beautifully: "Be aware of the power of mind, remember that we are all in process of unfolding. We can choose, we can weave; we hold the form, we dance it, and the moment comes when it is recalled in each of us...By the power of its sound it is a reality...The Beauty Path, the Great Peace, is the meeting of ourselves, the perceptions of our minds, and the cessation of those waves and thought forms that create discord. Let us sow the seed of peace in all our actions, thoughts and words."

The Spiritual Path assists "mortal man in gaining and understanding of his/her place within the Divine Order and allows mankind to experience the greater purpose of evolution from a more Universal perspective."

Akhenaton

"When mankind perceives reality through an open, evolved heart chakra, mortal man experiences reality by "feeling" the energy states of that reality." We can safely say that real truths cannot be said, talked about or even written, they must be lived, experienced and felt."

"Remember to be cautious with your thoughts and your words; they are the tools of creation.

Remember cause and effect.

Remember there is nothing more important than love."

(Mary Sparrowdancer - "The Love Song of The Universe")

Closing

Quantum physicists, neuroscientists, psychologists and mystics have evolved to the point where a significant paradigm shift is happening. The universe is viewed as sympathetically connected, unifying, matter, energy and consciousness.

Physics unites the many mathematical principles and perhaps one day physics will merge with spiritual and religious principles. The gap is narrowing.

By the mere sample I've given here, it surely demonstrates the connection of the role of science and consciousness plays. It's an interweaving of basic fundamental processes. Science has everything to do with consciousness, it is One with it. There is no one place something "starts" and "ends". It is a continuum of the same. Just like there are not real defining lines of the dimensional levels. All is connected.

There is a mystical world that we traverse where there is no time/space and dimensional divisions. Such as there are no divisions between the sciences of the dimensions - for all properties are found throughout the universe. There are worlds in our many realities that we haven't begun to explore, either as scientists or mystics.

As science is discovering more and more uniquely mysterious properties of the universe, we are discovering more and more of the properties of our being and our consciousness.

I had written the following several years ago regarding the "The Heart's Code" section of the web site, that I still find applicable and profound. " All living things are made up of cells - like trillions of tuning forks resonating together by the energy of the heart. The cells reverberate in a concert of energetic harmony. Every cell is literally a mini-heart hammering with energy. As complex as they are, our cells are more space than "stuff". Every cell is 99.999% empty space with subatomic bundles of energy whizzing through at the speed of light."

"If you really want to know what the body looks like, look up to the evening sky and see the stars, the cells of cosmic energy scattered through space. If you really want to know what the body looks like, listen to the waves and the wind for the energy they carry. If you really want to know what the body's energy feels like, be aware of a gently breeze and sense the molecules of information breathed in and out by every person and thing that has ever lived. If you want to get a glimpse of how your whole body/heart/brain system sounds when it works collectively, listen to a symphony."

To quote Black Elk, "Peace..comes within the souls of men when they realize their relationship, their oneness, with the universe and all its powers and when they realize that at the center of the Universe dwells, Wakan Tanka, and that this center is really everywhere, it is it within each of us."

T.H. Huxley says, "The question of all questions for humanity, the problem that lies behind all others and is more interesting than any of them is that of the determination of man's place in Nature and his relation to the Cosmos."

Quantum physics suggests that by redirecting our focus, our intentions and attentions, we bring in a new course of events while simultaneously releasing an existing course of events that no longer serve us. A matter of replacing, renewing and regenerating a new thought form that better serves to heighten the consciousness of everyone. We must find, understand and fully comprehend this interrelationship and oneness of our humanitarian nature and the impact on the whole of creation. We are realizing the

complete being we are by understanding that even at the quantum level we affect things around us.

In finding our place in Nature, we just may save the Earth and ourselves in the process.

A New Paradigm in Quantum Interconnectedness

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