The Science of Oneness

"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 complimentarity (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)

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."

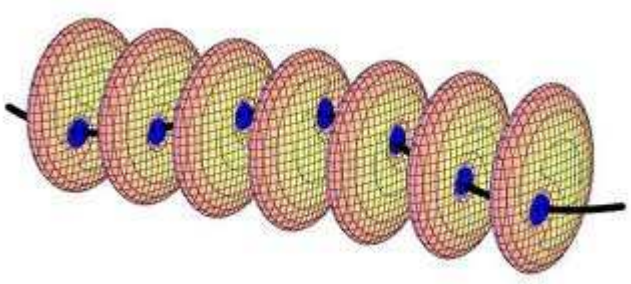
Talbot continues, "Bohm, believes that our almost universal tendency to fragment the world and ignore the dynamic interconnectedness of all things is responsible for many of our problems...we believe we can extract the valuable parts of the earth without affecting the whole...treat parts of our body 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"
MichioKaku

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 unravelled 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

"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 timeless 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".

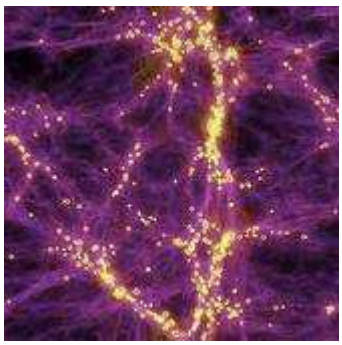
It goes on to say, "letter forms themselves have intrinsic geometric and mathematical properties that point us to a profound knowledge of life and the nature of human consciousness". (In some other cultures and ancient histories, Hebrew was and is regarded as the Language of Light because of it's mathematical 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." Paul 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." Gregg Braden - The Isaiah Effect

Excerpted from the website:

http://www.starstuffs.com/physcon/