

## Appendix 8. Science Concepts: Nonlocality, Quantum entanglement, Hyperspace, Scalar energy/wave

Below are materials that I found in the internet that may help give understanding on the amazing effects of agnihotra. I also posted writings of Lynne McTaggart, from two books. They are very interesting and enlightening...

- 1) **Nonlocality.** This explains why we are interconnected although separated in time and space. What happens here (in thought, speech, action) simultaneously happens elsewhere; intention affects things here and there as well...

**Quantum entanglement**, also called the **quantum non-local connection**, is a property of the [quantum mechanical state](#) of a system containing two or more [objects](#), where the objects that make up the system are linked in a way such that one cannot adequately describe the quantum state of a constituent of the system without full mention of its counterparts, even if the individual objects are [spatially separated](#). This interconnection leads to non-classical [correlations](#) between observable [physical properties](#) of remote [systems](#), often referred to as nonlocal correlations. During the formation of [quantum theory](#), this property of entanglement was recognized as a direct consequence.. <http://www.answers.com/topic/quantum-entanglement>.

Entanglement is a strange feature of quantum physics, the science of the very small. It's possible to link together two quantum particles — photons of light or atoms, for example — in a special way that makes them effectively two parts of the same entity. You can then separate them as far as you like, and a change in one is instantly reflected in the other. This odd, faster than light link, is a fundamental aspect of quantum science. <http://calitreview.com/51>

**From “The Field. The Quest for the Secret Force of the Universe” by Lynne McTaggart. 2008. 268 pgs. Harper Collins, New York, USA.**

“Scientists did allow for a universal connectedness in the universe, but only in the quantum world: which was to say, the realm of the inanimate and not the living. Quantum physicists had discovered

a strange property in the subatomic world called '**nonlocality**'. This refers to the ability of a quantum entity such as an individual electron to influence another quantum particle instantaneously over any distance despite there being no exchange of force or energy. **It suggested that quantum particles once in contact retain a connection even when separated, so that the actions of one will always influence the other, no matter how far they get separated.** Albert Einstein disparaged this 'spooky action at a distance', and it was one of the major reasons he so distrusted quantum mechanics, but it has been decisively verified by a number of physicists since 1982.

Nonlocality shattered the very foundations of physics. Matter could no longer be considered separate. Actions did not have to have an observable cause over an observable space. Einstein's most fundamental axiom wasn't correct: at a certain level of matter, things could travel faster than the speed of light. Subatomic particles had no meaning in isolation but could only be understood in their relationships. The world, at its most basic, existed as a complex web of interdependent relationships, forever indivisible.

Perhaps the most essential ingredient of this interconnected universe was the living consciousness that observed it. In classical physics, the experimenter was considered a separate entity, a silent observer behind glass, attempting to understand a universe that carried on, whether he or she was observing it or not. In quantum physics, however, it was discovered, the state of all possibilities of any quantum particle collapsed into a set entity as soon as it was observed or a measurement taken. To explain these strange events, quantum physicists had postulated that a participatory relationship existed between observer and observed - these particles could only be considered as 'probably' existing in space and time until they were 'perturbed', and the act of observing and measuring them forced them into a set state -- an act akin to solidifying Jell-O. This astounding observation also had shattering implications about the nature of reality. It suggested that the consciousness of the observer brought the observed object into being. Nothing in the universe existed as an actual 'thing' independently of our perception of it. **Every minute of every day we were creating our world.**

... But classical physics or biology could not account for such fundamental issues as how we can think in the first place; why cells organize as they do, how many molecular processes proceed virtually instantaneously; why arms develop as arms and legs as legs, even though they have the same genes and proteins; why we get cancer; how this machine of ours can miraculously heal itself; and even what knowing is - how it is that we know what we know. Scientists might understand in minute detail the screws, bolts, joints and various wheels, but nothing about the force that powers the engine. They might treat the smallest mechanics of the body but still they appeared ignorant of the most fundamental mysteries of life.

If it were true that the laws of quantum mechanics also apply to the world at large, and not just the subatomic world, and to biology and not just **tile** world of matter, then the entire paradigm for biological science was flawed or incomplete. Just as Newton's theories had eventually been improved upon by the quantum theorists, perhaps Heisenberg and Einstein themselves had been wrong, or at least only partially right. If quantum theory were applied to biology on a larger scale, we would be viewed more as a complex network of energy fields in some sort of dynamic interplay with

our chemical cellular systems. The world would exist as a matrix of indivisible interrelation... What was so evidently missing from standard biology was an explanation for **the organizing principle — for human consciousness.**

2) **Hyperspace.** This is the realm that we enter into beyond the ordinary. Some people can go into this more than others, and they are able to more readily tap the secrets of the universe.

Hyperspace Definition : space of more than three dimensions

**Theoretical dimension:** in science fiction, a theoretical dimension in which things not physically possible in ordinary space such as intergalactic travel can happen.

<http://mw4.merriam-webster.com/dictionary/hyperspace>

**Entering Hyperspace** by LYNNE MCTAGGART ... from "Measuring the Immeasurable. The Scientific Case for Spirituality". 552 pgs. Sounds True, Boulder Colorado, USA. 2008.

Richard Davidson, a neuroscientist and psychologist at the University of Wisconsin's Laboratory for Affective Neuroscience, is an expert in "affective processing: the place where the brain processes emotion and the resulting communication between the brain and body. His work came to the attention of the Dalai Lama, who invited him to visit India, in 1992; a science buff, His Holiness wished to understand more about the biological effects of intensive meditation. Afterward, eight of the Dalai Lama's most seasoned practitioners of Nyingmapa and Kagyupa meditation were flown to Davidson's lab in Wisconsin. There, Davidson attached 2.56 EEG sensors to each monk's scalp in order to record electrical activity from a large number of different areas in the brain. The monks were then asked to carry out compassionate meditation. The meditation entailed focusing on an utter readiness to help others and a desire for all living things to be free of suffering. For the control group, Davidson enlisted a group of undergraduates who had never practiced meditation and arranged for them to undergo a week's training, then attached them to the same number of EEG sensors to monitor their brains during meditation.

After fifteen seconds, according to the EEG readings, the monks' brains did not slow down; they began speeding up. In fact, they were activated on a scale neither Davidson nor any other scientist had ever seen. The monitors showed sustained bursts of high gamma-band activity—rapid cycles of 25 to - hertz. The monks had rapidly shifted from a high concentration of beta waves to a preponderance of alpha, back up to beta, and finally up to gamma. **Gamma band, the highest rate of brain-wave frequencies, is employed by the brain when it working its hardest: at a state of rapt attention, when sifting through working memory, during deep levels of learning, in the midst of great flashes of insight.** As Davidson discovered, when the brain operates at these extremely high frequencies, the phases of brain waves (their times of peaking and troughing) all over the brain begin to operate in synchrony. This type of synchronization is considered crucial for achieving heightened awareness. The gamma state is even believed to cause changes in the brain's synapses, the junctions over which electrical

impulses leap to send a message to a neuron, muscle or gland. That the monks could achieve this state so rapidly suggested that their neural processing had been permanently altered by years of intensive meditation. Although the monks were middle-aged, their brain waves *were* far more coherent and organized than those of the robust young controls. Even during their resting state, the Buddhists showed evidence of a high rate of gamma-band activity, compared with that of the neophyte meditators. Davidson's study bolstered other pieces of preliminary research suggesting that certain advanced and highly focused forms of meditation produce a brain operating at peak intensity. Studies of yogis have shown that during deep meditation their brains produce bursts of high-frequency beta or gamma waves, which are often associated with moments of ecstasy or intense concentration. **Those who can withdraw from external stimuli and completely focus their attention inward appear more likely to reach gamma-wave hyperspace.** During peak attention of this nature, the heart rate also accelerates. Similar types of effects have been recorded during prayer. A study monitoring the brain waves of six Protestants during prayer found an increase in brain-wave speed during moments of the most intense concentration.

Different forms of meditation may produce strikingly different brain waves. For instance, yogis strive for anuraga, or a sense of constant fresh perception; Zen Buddhists aim to eliminate their response to the outer world. Studies comparing the two find that anuraga produces heightened perceptual awareness—magnified outer focus—while Zen produces heightened inner absorption: magnified inner awareness. Most research on meditation has concerned the type that focuses on one particular stimulus, such as the breath or a sound, like a mantra. In Davidson's study, the monks concentrated on having a sense of compassion for all living things. It may be that compassionate intention—as well as other similar, "expansive" concepts—produces thoughts that send the brain soaring into a supercharged state of heightened perception.

When Davidson and his colleague Antoine Lutz wrote up their study, they realized that they were reporting the highest measures of gamma activity ever recorded among people who were not insane. In their results they noticed an association between level of experience and ability to sustain this extraordinarily high brain activity; those monks who had been performing meditation the longest recorded the highest level of gamma activity. The heightened state also produced permanent emotional improvement by activating the left anterior portion of the brain—the portion most associated with joy. The monks had conditioned their brains to tune in to happiness most of the time.

In later research, Davidson demonstrated that meditation alters brain wave patterns, even among new practitioners. Neophytes who had practiced mindfulness meditation for only eight weeks showed increased activation of the "happy-thoughts" part of the brain and enhanced immune function.

In the past, neuroscientists imagined the brain as something akin to a complex computer, which was fully constructed in adolescence. Davidson's results supported more recent evidence that the "hardwired" brain theory was outdated. The brain appeared to revise itself throughout life, depending on the nature of its thoughts. Certain sustained thoughts produced measurable physical differences and changed its structure. Form followed function; consciousness helped to form the brain.

Besides speeding up, brain waves also synchronize during meditation and healing. In fieldwork with indigenous spiritual healers on five continents, Krippner suspected that, prior to healing, the healers all underwent brain "discharge patterns" that produce a coherence and synchronization of the two hemispheres of the brain, and integrate the limbic (the lower emotional center) with the cortical systems (the seat of higher reasoning).

At least twenty-five studies of meditation have shown that during meditation, EEG activity between the four regions of the brain synchronizes." Meditation makes the brain permanently more coherent—as might prayer. A study at the University Pavia in Italy and John Radcliffe Hospital in Oxford show that **saying the rosary had the same effect on the body as reciting a mantra**. Both were able to create a "striking", powerful, and synchronous increase" in cardiovascular rhythms when *recited* six times a minute.

Another important effect of concentrated focus is the integration of both left and right hemispheres. Until recently, scientists believed that the two sides of the brain work more or less independently. The left side was depicted as the "accountant," responsible for logical, analytical, linear thinking, and speech; and the right side as the "artist," providing spatial orientation, musical and artistic ability, and intuition. But Peter Fenwick, consultant neuropsychiatrist at the Radcliffe Infirmary in Oxford and the Institute of Psychiatry at the Maudsley Hospital, gathered evidence to show that speech and many other functions are produced in both sides of the brain and that the brain works best when it can operate as a totality. During meditation, both sides communicate in a particularly harmonious manner.

Concentrated attention appears to enlarge certain mechanisms of perception, while tuning out "noise." Daniel Goleman, author of *Emotional Intelligence*, carried out research showing that the cortices of meditators "speed up," but get cut off from the limbic emotional center. With practice, he concluded, anyone can carry out this "switching-off" process, enabling the single mode of the brain to experience heightened perception without an overlay of emotion or meaning. During this process, all of the power of the brain is free to focus on a single thought: an awareness of what is happening at the present moment.

Meditation also appears to permanently enhance the brain's reception. In several studies, meditators have been exposed to repetitive stimuli like light flashes or clicks. Ordinarily, a person will get used to the clicks, and the brain, in a sense, will switch off and stop reacting. But the brains of the meditators continued to react to the stimuli—an indication of heightened perception of every moment.

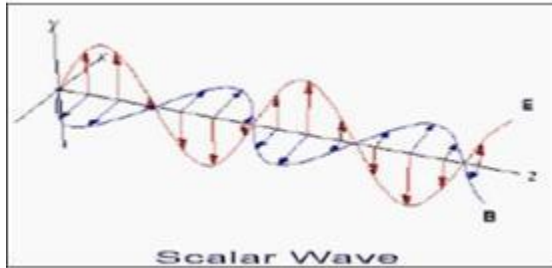
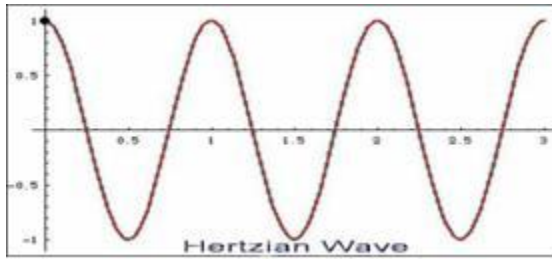
In one study, practitioners of mindfulness meditation—the practice of bringing heightened, nonjudgmental awareness of the senses' perceptions to the present moment—were tested for visual sensitivity before and immediately after a three-month retreat, during which time they had practiced mindfulness meditation for sixteen hours a day. The staff members who did not practice the meditation acted as a control group. The researchers were testing whether the participants could detect the duration of simple light flashes and the correct interval between successive ones. To those without mental training in focusing, these flashes would appear as one unbroken light. After the retreat, the practitioners were able to detect the single-light flashes and to differentiate between successive flashes. Mindfulness meditation enables its practitioners to become aware of unconscious processes, and to remain exquisitely sensitive to external stimuli. As these studies indicate, certain types of concentrated focus, like meditation, enlarge the mechanism by which we receive information and clarify the reception. *We turn into a larger, more sensitive radio.*

3). **Scalar energy and Zero point energy**. This is a type energy found long before, but recently being used in making gadgets for energy improvement, healing and many other applications, constructive or destructive. It might have a lot to do with rituals, prayer, intentions, and others. I believe also with the power of the pyramid and agnihotra.

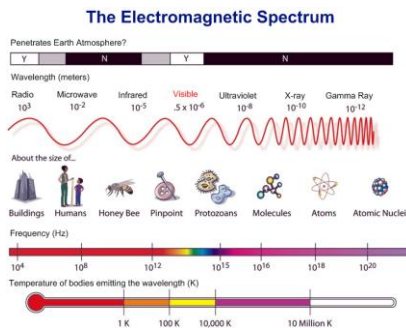
[http://www.prahlad.org/pub/bearden/scalar\\_wars.htm](http://www.prahlad.org/pub/bearden/scalar_wars.htm)

A "new" kind of electromagnetic (EM) wave has been discovered in the empty vacuum of space which, when engineered, can be an inexhaustible supply of energy in great magnitude at any place in the universe. The word "new" is in quotes because the discovery really goes back to Nikola Tesla and his discovery of what he called "radiant energy." It is also not "new" because the Russians (KGB) have been working on this technology **for over 30 years** and have **weaponized** these "new" longitudinal scalar waves to a great degree. ... the layman will need to understand that **there is a new kind of electromagnetic energy** that is altogether different from what he knows, e.g. radio, TV, cell phones, etc. The ordinary EM waves that we have known about are called transverse EM waves, to distinguish them from the new longitudinal EM waves. These scalar waves do not actually exist in our "material" world, but exist only in the vacuum of empty space, or the time domain. And we must keep in mind that this vacuum of space we speak of exists all through everything. Even our bodies are mostly empty space between atoms and molecules. So the gateway to this seething ocean of energy can be there at every point in the universe. This seething ocean of energy is all around us and all through us.

**What does "Zero Point" mean?**... in the 17th century, it was thought that a totally empty volume of space could be created by simply removing all matter and, in particular, all gases. That was our first concept of the vacuum. Just get rid of all the gas... Late in the 19th century, it became apparent that the region still contained thermal radiation. But it seemed that the radiation might be eliminated by cooling. So the second concept of getting a real vacuum is to cool it down to zero temperature. Just go all the way to absolute zero. Then we've got a real vacuum. Right? Well, since then, both theory and experiment have shown that **there is a non-thermal radiation in the vacuum** and that **it persists** even if the temperature could be **lowered to absolute zero**. Therefore, it was simply called the 'zero point' radiation."



The electromagnetic or Hertzian wave



## Nature's Healing Energy - "Scalar Energy"

As you will see, scalar wave energy is merely another application of healing energy. It is the application of science as nature intended. Scalar Waves have always existed and were first documented by Nicola Tesla. Albert Einstein discovered the practical application of the scalar wave and proposed the theory and proved mathematically that time and space is relative -that scalar waves are nonlinear, not electromagnetic, and exist in five-dimensional space/time, a dimension where there is no time or space. That means scalar waves do not decay with time or distance. These non-linear waves propagate throughout the body via the crystalline lattices of the elaborate collagen network comprising of extra-cellular space.

The standard definition of scalar waves is that they are created by a pair of identical (or replicant) waves (usually called the wave and its antiwave) that are in phase spatially, but out of phase temporally. That is to say, the two

waves are physically identical, but 180 degrees out of phase in terms of time.

Scalar waves are a whole different animal from normal hertzian waves. They even look different - like an infinitely projected mobius pattern on axis.

### Different - How?

Scalar energy is different from standard electromagnetic fields in a number of important ways. It's more field like than wavelike. Instead of running along wires or shooting out in beams, it tends to fill its environment. This becomes very important in terms of developing the technology for embedding water and food with scalar energy.

Scalar Energy is capable of passing through solid objects with no loss of intensity. It implants its signature on solid objects. This is actually the heart of the issue. All electric fields can implant their signature on objects, but not to the degree that scalar energy can. This becomes extremely important when we actually talk about the mechanics of embedding the energy field in water and food, and then transferring that charge from the water and food into every cell of your body. Scalar energy can regenerate and repair itself indefinitely.

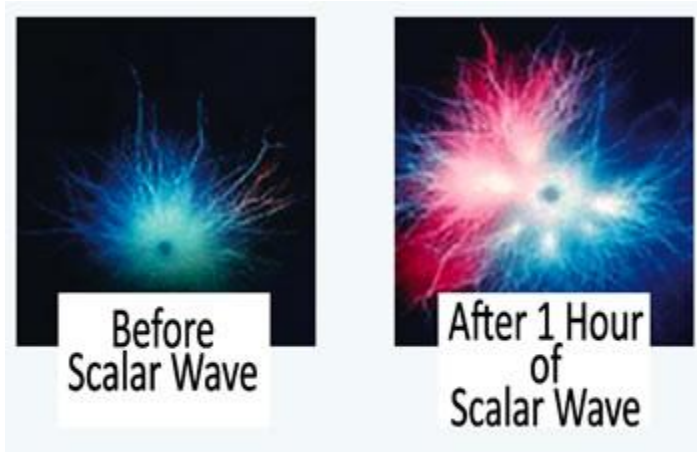
<http://bioenergiseme.com/articles/energy---for-the-technically-minded-person.html>

### What is a Scalar Wave? September 12, 2006

Posted by healthysself in Amplitude, Cell phone safety, DNA, Figure Eight, Mitochondria, Mobius Coil, Movement, Quantum Physics, Scalar Wave, Transformation, Waves.  
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“**Scalar waves** are produced when two electromagnetic waves of the same frequency are exactly out of phase (opposite to each other) and the amplitudes subtract and cancel or destroy each other. The result is not exactly an annihilation of magnetic fields but a transformation of energy back into a *scalar wave*. This scalar field has reverted back to a vacuum state of potentiality. Scalar waves can be created by wrapping electrical wires around a figure eight in the shape of a möbius coil. When an electric current flows through the wires in opposite directions, the opposing electromagnetic fields from the two wires cancel each other and create a scalar wave.”





“The DNA antenna in our cells’ energy production centers (mitochondria) assumes the shape of what is called a super-coil. Supercoil DNA look like a series of möbius coils. These möbius supercoil DNA are hypothetically able to generate scalar waves. Most cells in the body contain thousands of these möbius supercoils, which are generating scalar waves throughout the cell and throughout the body.”

