



Hello all,

Welcome to Coherent Breathing®, Volume 4, Issue 7:
The Story of COHERENCE and Color.



Figure 1: Initial COHERENCE Trademark

I formed COHERENCE LLC in 2005 and filed the trademark “COHERENCE®”. My initial filing was color coded as one sees it today at CoherentBreathing.com, where the letters of the word coherence are white, purple, blue, cyan, green, yellow, orange, red, and black, the spectrum of white light splitting into the colors of the rainbow in order of frequency, where I began with white (white light) and ended with black (zero light). A prism is the well known example of how white light is divided into the rainbow spectrum of color.

I spent 35 years in telecommunications technology and was familiar with fiber optics and wave division multiplexing (WDM), the technology that transmits multiple simultaneous streams of communication traffic over a single physical medium – *fiber*, by generating a different color of light for each stream of data, each channel. The technology behind WDM is the laser, which produces *coherent* light by employing a resonant chamber with mirrors at both ends. Laser emissions have precisely one wavelength (1/frequency) and one phase. Coherent light is extremely stable – stability defines coherence. This allows multiple colors to be transmitted over the same physical layer (e.g., fiber) without interference. It is fundamentally the same method that allows multiple radio channels to exist over the same “air waves”, separated by frequency, where color is related to frequency. This being said, WDM does not use frequencies in the visible spectrum of light, but in the much higher near-infrared range.

Usage of *coherence* abounds in modern day physics and specifically quantum mechanics where particles are considered coherent when their electromagnetic fields (waves) are precisely in synchrony. When precisely in phase, they have the ability to influence each other, thereby creating a superposition, a blurred state that can only be expressed in terms of probability. *When quantum particles are perfectly in-phase they are in a state of coherence.*



When they fall out of phase for whatever reason, they decohere. In quantum mechanics, a current scientific focus is how to keep particles in coherence/superposition, this control lending itself to the “qbit” or quantum bit, a particle in superposition, qbits being the basis on which quantum computing works.

Anyway, I built on the relevance of coherence and resonance to human physiology, which is what Coherent Breathing® is about, where I have posited that breathing at the nominal rate of 5 breaths per minute generates a highly stable internal frequency at which blood and fluid flow. As with the laser, this occurs due to *resonance*, by consciously breathing at the frequency at which the cardio – pulmonary – circulatory system of the human body naturally oscillates, where we desire to keep it oscillating at this frequency all the time, circumstances permitting, just like a pendulum swinging. Why? Because it promotes homeostatic stability. It does this by reducing internal chaos – noise, noise manifesting as internal tension, mental chatter, and confusion.

My trademark is also about yoga and meditation, where Coherent Breathing is a central gateway to meditation and yogic experience - meditation happens automatically.

Figure 2: A water glass with diffraction grating



This is the observation that I had personally, leading me to understand the significance of the method. I found it while I was simultaneously instrumented with EEG, HRV, galvanic skin response, and biocurrent to ground. Today, it is commonplace for chakras to be associated with colors of the rainbow, though this is a relatively recent correspondence, circa early 20th century. I like this correspondence and it has always made sense to me. I consider it to be correct in concept, relative to energy and vibratory frequency of chakras.

My personal yogic practice and experience being a fusion of Eastern practices and philosophies, specifically Tantric yoga of India, Shaivist yoga of Kashmir, and Taoist yoga of China origin, I adhere to a 9 chakra model, which I can summarize as the 7 commonly understood chakras associated with the physical body and a chakra directly above – Heaven (white), and another directly below – Earth (black). Adding Heaven above and Earth below, we find that the body is “suspended” as if between two great magnets. As we find this line the sushumna is tuned like a harp string. As we breathe coherently it begins to play. *We find that we are very much like trees in this regard, rooted in Earth but reaching for the sky, the entire structure of the body being balanced and resonant.* I consider this understanding to be at the top of the list of the most important things that I have learned.

What does it mean for the body to exist in a state of balance and resonance most of the time? Here is my thinking:

- a) Coherent circulation of blood results in a resonant intracellular/interstitial environment, where waves occur with every phase of inhalation/exhalation.
- b) These waves propagate into cells, cells holding ~66% of all fluid in the human body. This fluid is referred to as “cytosol”.
- c) Cells are the living components of life, cells containing intracellular anatomical structures including the nucleus, cytoskeleton, and organelles, inclusive of mitochondria.
- d) Mitochondria are the cell’s energy production utilities. Mitochondrial DNA is a determinant of a cells coherence, its stability, its life span. As mitochondrial DNA is gradually damaged, energy production wanes and the cell eventually perishes. The collective energy produced by the trillions of mitochondria is the energy that sustains the life of the body.
- e) This collective energy is the *prana* of yoga and the *qi* of qi gong. It is bioelectricity.
- f) A field exists between Heaven and Earth. When we are atuned to this field, the entire body resonates, inside and out. Humankind has evolved to be erect. There is a natural field that aids in this process. (This is explained in [Wuji Qi Gong And The Secret Of Immortality](#).)

Stephen Elliott, President, COHERENCE LLC

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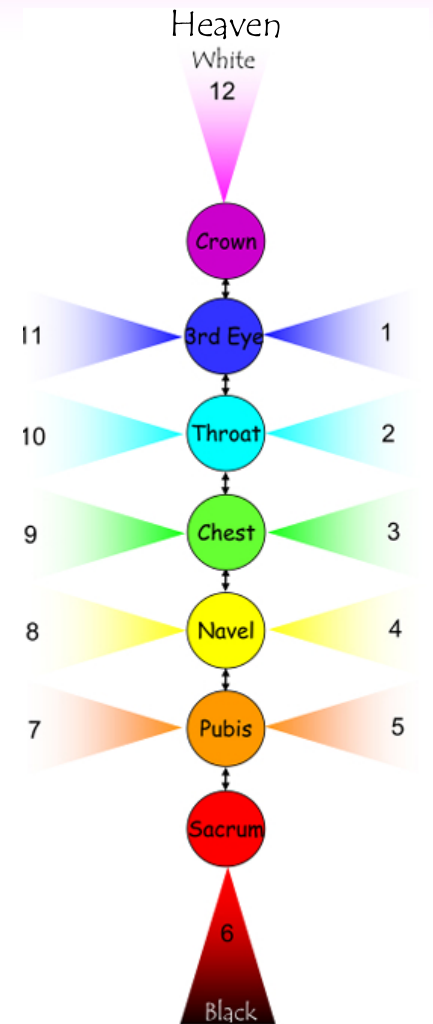


Figure 3: 7 Chakras Bounded By Heaven & Earth