

Chaos or Coherence – Gregg Braden and Howard Martin

This ‘age’ is closing down to a new cycle

We are presently experiencing a close in the cycle that has been in place for 5000 years. It is a time to **choose** what we want in our new cycle. Will we choose to create the best possible world?

We are ending a new world age and beginning a new foundation of another new stage/shift in the earth. The world age ending brings us global weather changes as well as human body changes; it also creates “Choice Points” in Civilizations!!

In previous times the changes brought great destruction such as Atlantis and Lemuria, (and the great flood) and many other events as written in the ancient texts.

Today our choice is clear; we can choose Chaos or Coherence!

We all benefit personally

Our personal changes are actually linked to the very fields of the earth that are undergoing the change at the close of this cycle. The magnetic fields of our heart are directly linked to the magnetic fields of the earth; the very field that sustains life on this planet.

As we learn to manage those fields within our hearts by **choosing** the way we **feel** about what is happening in our world, we are influencing those fields that connect all life on this planet in a very powerful, positive and life changing way. That is the beauty of us coming together at the close of this cycle. When we are faced with the greatest challenges of 5000 years of recorded human history, and only at this time it is no accident that we are coming to a realisation, that we are part of the field that is changing, and we are learning the language that can stabilise and bring coherence to those changing fields.

Incoherence (Chaos)

When a person feels stress, overwhelm, anxiety, uncertainty and fear, the heart is sending chaotic and incoherent signals to the brain/mind, triggering stressful responses. The higher cortical functions are inhibited, meaning the heart and brain are out of alignment, so solutions to personal or world problems elude us.



Collectively, these negative emotions are registered in the heart and brain’s electromagnetic fields, generating a global stress and incoherence wave that goes out to those around us and around the globe. Stress and incoherence are intensified by instant massmedia reports – the natural disasters, social upheaval, economic turmoil and more.

Coherence

When you feel genuine hope, care and compassion, your heart is sending harmonious and coherent signals to the brain/ mind,

replacing feelings of separation with a sense of connection. The heart and brain are aligned and in sync. The higher cortical functions are enhanced, facilitating objective, sober assessment and intuitive perception. You perceive more wholeness, and solutions to problems are more apparent.

Collectively, positive emotions such as hope, care, compassion and appreciation generate a global coherence wave whose electromagnetic field goes out to those around us and across the globe. Increasing heart alignment and focusing on heart-based living have the potential to create a global coherence wave to facilitate new solutions for the world's problems.

More than ever people need to understand the physiology of coherence that underlies heart-based principles and the science behind global coherence.

Heart-Brain Interactions

The heart and brain maintain a continuous two-way dialogue, each influencing the other's functioning. Although it is not well known, the heart sends far more information to brain than the brain sends to the heart and the signals the heart sends to the brain can influence perception, emotional processing and higher cognitive functions. This system and circuitry is viewed by neurocardiology researchers as a "heart brain." The heart also generates the strongest rhythmic electromagnetic field in the body and this actually can be measured in the brain waves of people around us. For related Research Publications, go to www.heartmath.org

Head-Heart Interactions

Traditionally, the study of communication pathways between the "head" and heart has been approached from a rather one-sided perspective, with scientists focusing primarily on the heart's responses to the brain's commands. However, we have now learned that communication between the heart and brain is actually a dynamic, ongoing, two-way dialogue, with each organ continuously influencing the other's function. Research has shown that the heart communicates to the brain in four major ways: neurologically (through the transmission of nerve impulses), biochemically (via hormones and neurotransmitters), biophysically (through pressure waves) and energetically (through electromagnetic field interactions). Communication along all these conduits significantly affects the brain's activity. Moreover, our research shows that messages the heart sends the brain can also affect performance.

The heart communicates with the brain and body in four ways:

- Neurological communication (nervous system)
- Biophysical communication (pulse wave)
- Biochemical communication (hormones)
- Energetic communication (electromagnetic fields)

The studies described in this section probe several of these communication pathways, looking specifically at how the brain responds to patterns generated by the heart during positive emotional states. The first two studies focus primarily on neurological interactions, demonstrating that the afferent signals the heart sends the brain during positive emotions can alter brain activity in several ways. In the first study, we find that cardiac coherence can drive entrainment between very low frequency

brainwaves and heart rhythms, thus further expanding our understanding of the physiological entrainment mode described in the previous section. In the second study, we learn that coherent heart rhythms also lead to increased heart-brain synchronization. The implications of these findings are explored in the third study, which shows that in states of high heart rhythm coherence, individuals demonstrate significant improvements in cognitive performance.

Taken together, the results of these studies demonstrate that intentionally altering one's emotional state through heart focus modifies afferent neurological input from the heart to the brain. The data suggest that as people experience sincere positive feeling states, in which the heart's rhythms become more coherent, the changed information flow from the heart to the brain may act to modify cortical function and influence performance. These findings may also help explain the significant shifts in perception, increased mental clarity and heightened intuitive awareness many individuals have reported when practicing the HeartMath techniques.

The final two studies in this section are concerned with energetic communication by the heart, which we also refer to as cardioelectromagnetic communication. The heart is the most powerful generator of electromagnetic energy in the human body, producing the largest rhythmic electromagnetic field of any of the body's organs. The heart's electrical field is about 60 times greater in amplitude than the electrical activity generated by the brain. This field, measured in the form of an electrocardiogram (ECG), can be detected anywhere on the surface of the body. Furthermore, the magnetic field produced by the heart is more than 5,000 times greater in strength than the field generated by the brain, and can be detected a number of feet away from the body, in all directions, using SQUID-based magnetometers (Figure 12). Prompted by our findings that the cardiac field is modulated by different emotional states we performed several studies to investigate the possibility that the electromagnetic field generated by the heart may transmit information that can be received by others.

The Heart's Electromagnetic Field

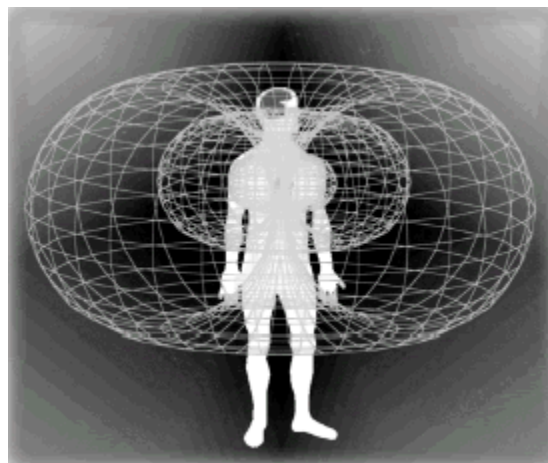


Figure 12.

The heart's electromagnetic field--by far the most powerful rhythmic field produced by the human body--not only envelops every cell of the body but also extends out in all directions into the space

around us. The cardiac field can be measured several feet away from the body by sensitive devices. Research conducted at IHM suggests that the heart's field is an important carrier of information.

Thus, further studies explored interactions that take place between one person's heart and another's brain when two people touch or are in proximity. This research elucidates the intriguing finding that the electromagnetic signals generated by the heart have the capacity to affect others around us. Our data indicate that one person's heart signal can affect another's brainwaves, and that heart-brain synchronization can occur between two people when they interact. Finally, it appears that as individuals increase psychophysiological coherence, they become more sensitive to the subtle electromagnetic signals communicated by those around them. Taken together, these results suggest that cardioelectromagnetic communication may be a little-known source of information exchange between people, and that this exchange is influenced by our emotions.

In summary

The heart is not just a blood pumping mechanical machine as was previously believed. Apart from the biological functions previously mentioned, it has now been discovered that the heart communicates the emotional state to the brain and these emotional states can be measured; such as appreciation, gratitude, forgiveness, sadness, anxiety, good intentions etc.

In the coherence state such as love, prayer, meditation, gratitude and appreciation, it adds potency to the condition of the heart and the rest of the body and affects global consciousness (collective consciousness).

The coherence and incoherence states can be measured. Not only have many tests proven that another person's emotions greatly affect us all and the world around us but also that of our animal friends and our pets. These tests were shown on a graph which showed the emotional state of a boy and a dog when together and later separated. Both showed a decline in the coherence state simultaneously when separated, and changed to that of the coherence state when brought back together.

The magnetic field acts as a blanket and the human heart is the strongest. All life is affected by this field and the human heart and the planet's field is strongly connected. In other words all living systems, such as animals, plants, the planet, humans and consciousness itself is affected by the emotions we are feeling, both incoherence and coherence.

A global network of sensitive magnetic field detectors that monitor fluctuations in the earth's geomagnetic fields and resonances in the ionosphere shows us that the earth's magnetic field is affected by human emotion, such as September 11th 2001 – this has been measured by science and showed a considerable incoherence state. In contrast, it has also been measured when a group of people around the world prayed and sent good intentions at times of war and suffering. This also resulted in a decline in fighting at the time the prayers took place and fighting was resumed when the prayers stopped.

In essence; we all have the ability to influence the global effects of our planet and what we 'give out' from our heart's magnetic field.

For more information on the above visit www.heartmath.org