Saybrook University

8100 Independent Study

Instructor: Jeanne Achterberg, Ph.D.

Final Paper #3

Heart Coherence, Intuition, and Telepathic Animal Communication:

Exploring the Heart Connection

Deborah Erickson
Deborah@deboraherickson.com
360.790.6042

December 5, 2010

Introduction

In almost every culture of the world the heart has been recognized as a source of wisdom, spiritual insight, thought, and emotion. In our 21st century world scientists generally believe that consciousness originates in the brain. However, recent research suggests that the heart plays an important role as a highly complex organ with its own functional brain (McCraty, Bradley, and Tomasino, 2004).

As observed in the previous paper for this independent study, Grosso (2010) quotes Frederick Myers who saw the link between telepathy and love. "Love is a kind of exalted and unspecialized telepathy" (p. 4). Grosso continues with the observation that "Generosity of spirit would be commonplace, not exceptional, and love a byproduct of ordinary perception. Thus, in the flitting epiphanies of what today we call telepathy, we may be seeing signs of a new order of love" (p. 4). Is the heart the emotional and energetic source of intuition? This question will be further explored in this paper, with discussion on heart rate variability, heart coherence ratio, and the surprising role of the heart in the physiological evidence of intuition.

Heart Coherence

In order to gain insight into your intuitive heart sense, expanded awareness of your emotions and feelings is essential. This can be accomplished through regular practice of specific techniques to increase heart coherence, balance breathing, and calm emotional states. Psychophysiological coherence is a state of optimal function of both our psychological (mental and emotional) and physiological (bodily) processes.

Heart rate variability (HRV) is the naturally occurring beat-to-beat variation between consecutive heart beats. Although it feels like your heart beat is steady and regular, the pattern of a healthy heart is surprisingly irregular, with the time interval between consecutive beats

constantly changing and variable. This variability of heart rate is the result of the synergistic action of the two branches of the autonomic nervous system (ANS), which regulates most of the body's internal functions without conscious effort. "The sympathetic nerves act to accelerate heart rate, while the parasympathetic (vagus) nerves slow it down" (HeartMath, 2006, p. 1). These two branches of the nervous system are constantly interacting to maintain optimal heart action given the changing environment and conditions. HRV is a vibrant and accurate window into the functioning of the autonomic nervous system, health, and fitness. HRV is greatest when we are young, and as we age the variability becomes smaller, so it is also a marker of biological aging.

The following graphs demonstrate the very different results from two emotional states of the author. Using the HeartMath emWave Coherence Training Software, the first exercise in Figure 1 was conducted on October 16, 2010. It reflects a highly coherent ratio of 84% and a relaxed average heart rate of 73 over the three minutes of the test. The coherent pattern is characterized by regular, sine-wave-like form. This test was conducted on a lazy Saturday afternoon, where I was sitting relaxed and emotionally content on my couch in Olympia, Washington with notebook computer in my lap and my dogs at my side.

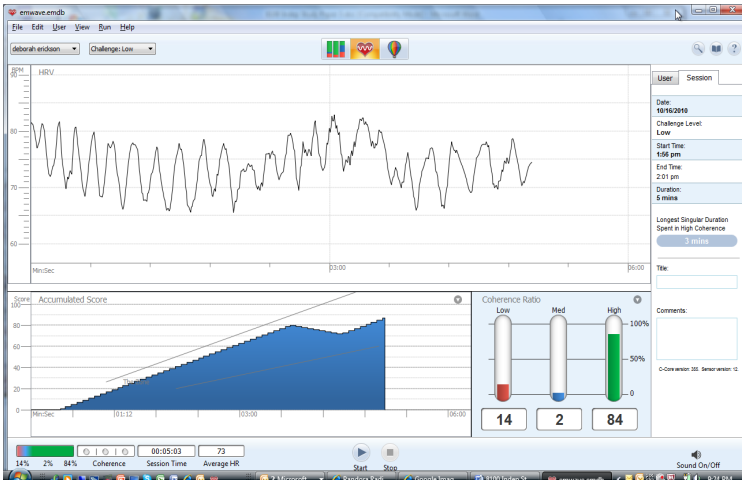

Figure 1: High Coherence

In contrast, the emotionally stressful of feelings of anger, frustration, and sadness result in low coherent heart rhythm patterns that show on the graph as jagged and erratic. Erratic heart rhythms also block our ability to think clearly. "Physiologically, this pattern indicates that the signals produced by the two branches of the ANS are out of sync with each other" (HeartMath, n.d., p. 2). Figure 2 shows the test results of an emWave exercise the next day, after an early afternoon drive of 110 miles to Portland, Oregon, to prepare for work. This result shows a significant incoherence ratio of 97% and an average heart rate of 120, indicating the stress of the drive and the sadness of leaving my husband, dogs, and home for the week.

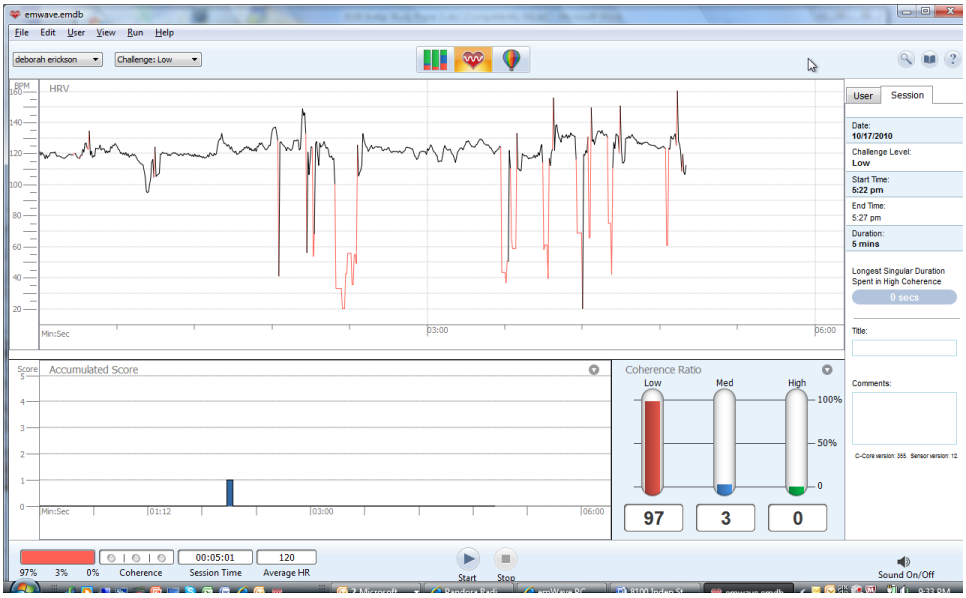

Figure 2: Low Coherence

The Heart Coherence / Telepathic Animal Communication Connection

Calming the brain and emotions -- being in high coherence ratio -- is critical to conducting a successful telepathic animal communication session. In preparation for a session, practiced, even breathing helps focus the mind on the physical body rather than chaotic thoughts. Another way to calm emotions is a visualization exercise of grounding,

such as seeing a tree trunk coming out of your seat and down into the center of the earth, and seeing earth energy flowing up into your body through this trunk.

Figure 3 and 4 show before-and-after HRV tests in preparation for an animal communication session. Figure 3 reflects baseline physiological status taken after a day of study and schoolwork; a heart variability ratio so low as to be non-existent, and an average heart rate of 85.

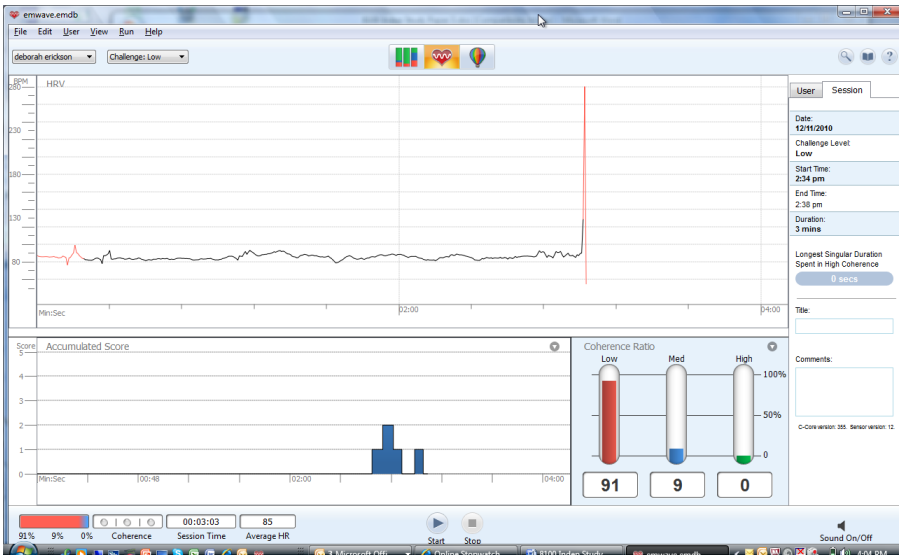

Figure 3: HRV Baseline Showing Low Coherence Before Mediation and Calming Exercises

After 15 minutes of grounding visualizations, mindful breathing, and calming exercises in preparation for an animal communication session, Figure 4 shows a high HRV coherence ratio of 91% and average heart rate of 80. The animal communication session that immediately followed this test was extremely successful. A dog named Rocky and his human companion were physically located in Spokane Washington, while the female human companion was on the telephone with the communicator. Neither she nor Rocky had ever experienced a communication session before, and she was pleased with the information she received from the exchange.

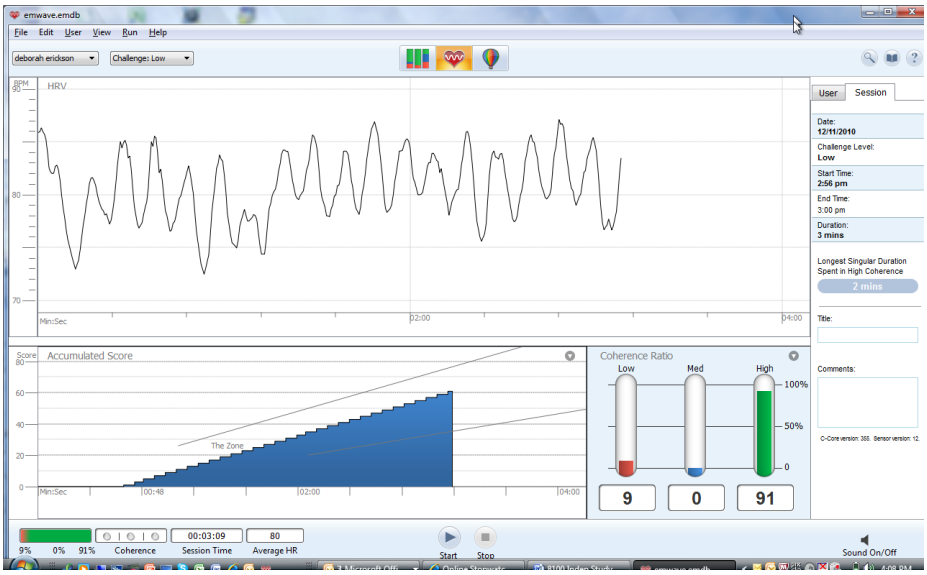

Figure 4: HRV High Coherence Ratio After Meditation

Electrophysiological Evidence of Intuition

The heart field is an electromagnetic field that can be detected and monitored by scientific instruments several feet away from an individual. Neurocardiology, a new discipline of heart research, is showing that the heart is a sensory organ with its own nervous system which "enables it to learn, remember, and make functional decisions independent of the brain's cerebral cortex" (McCraty, Bradley, and Tomasino, 2004, p. 15). A network so sophisticated as to be described as a "heart brain," the heart is continuously sending neural network signals which influence the brain's higher processing centers involved in perception, cognition, and emotional processing, as well as signals to the body in four different ways: neurologically, bio-physically, hormonally, and energetically (Global Coherence Initiative, 2008).

The heart's rhythmic electromagnetic field is about 60 times greater in amplitude than the brain, and is absorbed by every cell in the body. "The magnetic component is approximately 5000 times stronger than the brain's magnetic field and can be detected several feet away from the body with sensitive magnetomers" (McCraty, Bradley, and Tomasino, 2004, p. 16).

A stressful situation can stimulate the body to release 1,400 different biochemicals as hormones and neurotransmitters, which affect how you perceive and feel. The experience of an emotion results from brain, body, and heart working collectively. So what are emotions, really? Emotion is "energy in motion" and is derived from the Latin verb meaning "to move." Emotional energy is neutral, until added to a thought, which transforms the power for either positive or negative. If you're irritated about something and emotional energy is added, irritation transforms into the negative emotion of anger. When emotion is added to a positive feeling of affection, it transforms into the positive emotion of kindness and compassion. In short, our emotions give our thoughts power, both positive and negative. Studies have shown emotional stress is one of the key risk factors for heart disease and sudden cardiac arrest.

Research has shown that the emotional energy of the heart travels faster than the speed of thought. "Scientists have repeatedly confirmed that our emotional reactions show up in brain activity before we even have time to think. We evaluate everything emotionally as we perceive it. We think about it afterward" (Global Coherence Initiative, p. 4). Information related to an emotional state is communicated throughout the body via the heart's electromagnetic field.

The Institute of HeartMath conducted studies suggesting the heart's field is directly involved in intuitive perception outside the space and time perceived by our five senses. "Using a rigorous experimental design, we found compelling evidence that both the heart and brain receive and respond to information about a future event before the event actually happens. The heart appears to receive this intuitive information before the brain" (McCraty, Bradley, and Tomasino, 2004, p. 17). Is the heart's field linked to subtle energy fields outside of what we perceive as space and time? Additional studies have supported similar presentiment (future

feeling) effects. Presentiment describes a hunch, or gut feeling, and comes from the Latin words "sentir" (to feel) and "pre-" (before): To feel an event before it occurs.

Radin (1997) designed a study that measured heart rate, skin conductance, and peripheral blood volume of participants while viewing calm, pleasant scenes of nature or happy people, or disturbing, violent, or erotic images. He hypothesized that extreme graphics of a violent or erotic nature would product classical presentiment physiological "pre-sponses" before the pictures were seen by the participants. Calm graphics were not expected to have any physiological responses before after display. 31 participants were involved in four experiments and viewed a total of 1,060 target photos. "In accordance with a presentiment hypothesis, there was a clear orienting pre-sponse that peaked with a four standard error difference in physiological measures between extreme and calm targets one second *before* the target photo was displayed" (Radin, 1997, p. 163).

In another study Bierman and Radin (1997) saw even more granular results. Erotic versus violent material created a different pre-sponse pattern, with the erotic material peaking just before the display begins, while the electrodermal activity preceding violent material peaked about three seconds earlier: The heart field responded to the violent material significantly sooner than the erotic material. In a later study using fMRI, Bierman & Scholte (2002) observed brain regions near the amygdale (where we process certain strong emotions, including fear and sexual drive) exhibit activation *before* the violent and erotic pictures were seen by the eyes.

Radin (2004) returned to this research topic with three new double-blind experiments to replicate the original studies. The same basic design was used, but with new physiological monitoring hardware, software, stimulus photos, subject populations and testing environments.

These four experiments covered 4,569 trials with 133 participants. "The observed correlation across all four experiments was significantly positive ($p = 0.008$)" (p. 253).

Another recent precognitive study by Bem (2010) at Cornell University covered nine experiments involving more than 1,000 participants which tested for retroactive influence by "time-reversing well-established psychological effects so that the individual's responses are obtained before the putatively causal stimulus events occur" (p. 1). His design included tests of precognitive approach to erotic stimuli; precognitive avoidance of negative stimuli; retroactive priming (the flashing of a word in milliseconds before or after an image); retroactive habituation; and retroactive facilitation of recall. All but one of the experiments yielded statistically significant results.

Repeated positive results from these multiple studies "presents compelling evidence that the body's perceptual apparatus is continuously scanning the future" (McCraty, Atkinson and Bradley, 2004, p. 133). The data suggest that the heart and brain, together, are both involved in receiving, processing, and decoding intuitive information. It appears to be a system-wide process in which both (and perhaps other bodily systems) play a critical role; it is not localized to only the brain.

The Intuition / Animal Communication Connection

Obviously, published studies of telepathy and intuition are numerous while formal studies of telepathic animal communication do not exist. This field is not yet even on the radar of scientific inquiry, but experienced communicators recognize that expanding intuitive skills is an important component to increasing accuracy in animal communication.

Penelope Smith is a pioneer of the field of telepathic animal communication, and has been a practicing professional communicator for over 20 years. In her Basic Workshop, she

shares with students her "Tips on Enhancing Telepathic Communication with Animals (and All of Life):"

1. More than any other factor, your attitude toward animals influences how receptive you are to their communication, and how willing they are to communicate to you. Be humble and receptive, and allow animals to teach you.
2. Believe in your own intuitive ability to give and receive telepathic communication. Don't invalidate your perception of impressions, images, or messages in any form.
3. Be ready, receptive, mentally quiet, and alert. If your mind is busy, full of thoughts and background static, you can't listen and receive.
4. Cultivate flexibility. Be open to surprises and the unexpected. Let go of conventional notions of human/animal communication.
5. Be emotionally peaceful.
6. Be alert and calm. Don't force the communication too hard.
7. Let communication assume its own form, whether it be feelings, images, impressions, thoughts, verbal messages, sounds, other sensations, or simply knowing. Let the sense of meaning unfold by itself. Don't analyze, evaluate or criticize. Remain innocent and nonjudgmental.
8. Practice with a wide variety of animals in various situations.
9. Ask for help from any spiritual source that you trust.

(Smith, n.d.)

What this list clearly emphasizes is the importance of observing and maintaining a heart-centered space mentally and emotionally for a successful communication session. This takes practice and may require changes in lifestyle to avoid substances and environmental conditions

that agitate or dull the mind. Habits that reduce stress and increase calmness, like yoga, meditation, balanced food and exercise, adequate rest, and spending time in nature or with animal friends will all support increasing heart coherence and balanced emotions.

Conclusion

In a comment regarding psychic insight, Schwartz (2010) warns "grinding the diamond down to carbon dust in an attempt to study its sparkle...does not appear to be meaningfully addressing the nonlocal experience we know as…psychic functioning" (p. 231). However, Bernstein (2005) observes that from these multiple studies attempting to study the sparkle, several general conditions emerge:

- The human ability to acquire information intuitively does not decrease with distance.
- Intuition is not limited by the normal causal relations of time.
- Electromagnetism cannot be the 'carrier wave' for intuitive information.
- Intuition appears to be a more highly developed skill in some people, and can vary over time.

Theorists have proposed three possible explanations for intuitive information transfer observed in laboratory data. Bernstein (2005) elaborates,

> Because of intuition's apparent independence of distance, theorists have explored the quantum phenomenon of entangled non-locality. And because of intuition's independence of forward-only time, they have delved into elaborations of Einstein & Minkowski's space-time model. In an attempt to account for intuition's access to information about seemingly any location, theory-builders have explored the holographic principle, by which information about the whole can be contained in any of its minute parts (p. 8).

Rauscher and Targ (n.d.) delve deeper into a geometrical model of space-time. "This eight-dimensional metric is known as complex Minkowski space, and has been shown to be consistent with our present understanding of the equations of Newton, Maxwell, Einstein, and

Schrödinger" (p. 1). All of these theories are extremely complex models of mathematics and physics, and it is beyond the scope of this paper to be able to adequately describe the details of each. Very advanced scientists are continuing to explore the major elements of experimental parapsychology within the structure of modern physics.

The Global Coherence Initiative is a science-based initiative founded in 2008 working to shift human consciousness from instability and discord to balance, cooperation, and enduring peace. The organization has brought together noted scientists, researchers and leaders in many fields. Their hypothesis is that "large numbers of people intentionally creating heart-coherent states of care, love, compassion and appreciate can generate a coherent standing wave that will help offset the current planetary wave of stress, discord and incoherence" (Deyhle and McCraty, 2010, p. 2).

The author conducted a qualitative mini-research project this semester where data was gathered from other animal communicators via an online survey tool. Some of the animal communication experiences collected during this research were sad, some were funny, some were surprising, and some were amazing. But they were all brilliant, heart-felt examples of the love, compassion, and connectedness that animal communications invoke. As one participant shared, animal communicators have an opportunity as members of "The Underground Peace Movement…if one human at a time opens to listen to the animals this would be a totally different world" (Erickson, 2010, p. 10).

References

Bem, D.J. (2010). Feeling the future: Experimental evidence for anomalous retroactive influences on cognition and affect. *Journal of Personality and Social Psychology* (in press), retrieved December 2, 2010 from http://dbem.ws/FeelingFuture.pdf

Bernstein, P. (2005). Intuition: What science says (so far) about how and why intention works. *Endophysics, Time, Quantum and the Subjective*, Buccheri, R. et al, Editors. Singapore: World Scientific Publishing.

Bierman, D.J. & Radin, D.I. (1997). Anomalous anticipatory response on randomized future conditions. *Perceptual and Motor Skills*, *84*(2), 689-690.

Bierman, D.J. & Scholte, H.S. (2002). An fMRI brain imaging study of presentiment. *Journal of the International Society of Life Information Science, 20*, 380-388.

Deyhle, A. & McCraty, R. (2010). The Global Coherence Initative. Retrieved November 6, 2010 from http://www.glcoherence.org/templates/gcp/downloads/pdf/resources/published/energy-magazine-global-coherence-initiative.pdf

Erickson, D.L. (2010). Research 1040 Qualitative Research Methods Course, Assignment 3-E. Not published.

Global Coherance Initative (2008). The power of emotion. Boulder Creek, CA: HeartMath, LLC.

Grosso, M. (July 2010). Consciousness and parapsychology: A thought experiment. *Institute of Noetic Sciences Monthly e-News*, retrieved July 24, 2010 from http://www.noetic.org/noetic/noetic-now-issue-one-may/consciousness-and-parapsychology-thought-experimen/

HeartMath (2006). An appreciative heart is good medicine Retrieved December 1, 2010 from http://www.heartmath.com/templates/ihm/press_room/pdf/articles/An_Appreciative_Heart_is_Good_Medicine_gb06.pdf

HeartMath (n.d.). *Science: Overview*. Retrieved December 3, 2010 from the HeartMath emWave Coherence Training Software application library.

McCraty, R., Atkinson, M., & Bradley, R.T. (2004). Electrophysiological evidence of intuition: Part 1 The surprising role of the heart. *The Journal of Alternative and Complementary Medicine 10*(1), 133-143.

McCraty, R., Bradley, R.T., & Tomasino, D. (December 2004 – February 2005). The resonant heart. *Shift: At the Frontier of Consciousness.*

Radin, D. (1997). Unconscious perception of future emotions: An experiment in presentiment. *Journal of Scientific Exploration*, *11*(2), 163-180.

Radin, D. (2004). Electrodermal presentiments of future emotions. *Journal of Scientific Exploration, 18(*2), 253-273.

Rauscher, E.A. & Targ, R. (n.d.). Investigation of a complex space-time metric to describe precognition of the future. Apache Junction, AZ: Tecnic Research Laboratory. Retrieved November 23, 2010 from http://www.espresearch.com/espgeneral/doc-SpeedOfThought.pdf

Schwartz, S.S. (2010). Nonlocality and exceptional experiences: A study of genius, religious epiphany, and the psychic. *Explore: The Journal of Science and Healing, 6*(4), 227-235.

Smith, P. (n.d.). Tips on enhancing telepathic communication with animals (and all of life). Material from the Basic Workshop "How to Communicate with Animals."