As many people are saying, humanity has reached a critical juncture in the early years of the 21st century and we are on the threshold of enormous social, spiritual and cultural changes. Our material-driven world has resulted in great discord, economic instability, war, violence, crime, overpopulation, food and water shortages, and environmental pollution and destruction.

For the past two decades we have been transitioning out of nationally-based industrial societies and cultures into an interconnected, information-based global economy and to some extent a global society in which cultures with long-held values and customs often collide.

Evidence suggests this transition will continue to be difficult. The global financial crisis that began in 2008 and is still being felt -- sent shock waves around the world. It is clear that much of the human race remains stuck in a cycle of social and economic oppression, warfare, cultural intolerance and disregard for the environment.

Breaking this cycle is the greatest challenge our species has ever faced and requires a shift in human consciousness. The Global Coherence Initiative (GCI) founded in the summer of 2008 by the nonprofit Institute of HeartMath, www.heartmath.org, has brought together noted scientists, researchers and leaders in many fields and is working with and alongside people from every corner of the world to help facilitate this shift. The Global Coherence Initiative is a science-based initiative to unite millions of people in heart-focused care and intention to shift global consciousness from instability and discord to balance, cooperation and enduring peace.

GCI’s Three Major Hypotheses and its Long-term Goals

The scientific community increasingly believes the magnetic fields of the sun and earth affect life on earth from birth to death. Energetic influences from these fields are associated with numerous aspects of human health and wellness, both positive and negative. The popular media tends to focus on the negative correlations, such as societal conflicts, crime, terrorism, traffic accidents, etc. However, the greatest levels of human flourishing and creativity in science and the arts have also clearly been shown to occur during solar cycle activity peaks.

The Global Coherence Initiative, www.glcoherence.org, has synthesized the relationship between human beings and the solar and earth’s energetic fields in the following three major hypotheses.

• Hypothesis No. 1: All living things are interconnected and we communicate with each other via biological, and electromagnetic fields.

Throughout history, cultures such as Egyptian, Hopi, Ancient Indian, Mayan, Aztec and Chinese accepted this interconnectedness and also believed that their collective behavior could be influenced by the sun. Only recently has the scientific community begun to understand the nature of these interconnecting fields. In recent years, mainstream science has produced significant evidence of the interconnectedness of living things and that has resulted in a greater number of people embracing this concept.

Research at the Institute of HeartMath has shown that the heart radiates an electromagnetic field that can energetically affect those in our environment, whether we are conscious of it or not. A common experience of this energetic level interaction occurs when we are affected by each other’s moods, attitudes and
feelings. Importantly, this research has also shown that when we are in a heart coherent state we are more able to synchronize to others and gain a deeper awareness of the information available in the heart’s energetic field, as well as create a facilitative field environment.

• **Hypothesis No. 2:** Not only are humans affected by planetary energetic fields, but conversely the earth’s energetic systems are also influenced by collective human emotions and consciousness. Much of the planetary field environment is made up of the collective consciousness of the inhabitants.

This hypothesis is supported by research conducted by Roger Nelson and his team at Princeton University for the Global Consciousness Project utilizing a worldwide network of random number generators. Their findings have provided convincing evidence that human consciousness and emotionality create or interact with a global field, which affects the randomness of these electronic devices. The largest change in the random number generators occurred during the terrorist attacks on the U.S. World Trade Center on September 11, 2001. Even more intriguing was the fact that the random number generators were significantly affected some three hours before the first attack, suggesting a worldwide collective intuition about the impending event.

Further intriguing observations supporting the hypothesis that collective human emotion interacts with and modulates the earth’s magnetic field come from data collected by magnetometers on two National Oceanic and Atmospheric Administration (NOAA) space weather satellites. This data measuring fluctuations in the earth’s magnetic field also displayed a significant spike at the time of the September 11th attacks as well as obvious disturbances for several days thereafter, potentially reflecting an emotional stress wave generated by the mass of humans who were feeling angry and fearful (see Figure 1).

**Global Coherence Monitoring System (GCMS):**

In order to scientifically test these hypotheses, GCI is establishing a global network of sensitive magnetic field detectors to monitor fluctuations in the earth’s geomagnetic fields and resonances in the ionosphere. The Global Coherence Monitoring System will eventually deploy sensors at twelve strategic sites around the world. The first sensor site is located in Boulder Creek, CA and live data can be seen on the GCI website. GCI researchers postulate that the earth’s resonant frequencies, many of which are in the same range as human heart rhythms and brainwaves, will be the most sensitive in reflecting the effects of collective human emotions on the earth’s energetic systems.

**Hypothesis No. 3:** Large numbers of people intentionally creating heart-coherent states of care, love, compassion and appreciation can generate a coherent standing wave that will help offset the current planetary wave of stress, discord and incoherence.

Researchers further suggest that this outgoing coherent wave field will interact with and modulate planetary energetic and magnetic fields and positively impact the collective consciousness within the field environment. Seers such as the famous psychic Edgar Cayce claimed that humans meditating together could influence solar activity and that such meditations can help to establish a more peaceful future and reduce individual and collective stress. More and more groups are continuously forming with this intention. They are stanch believers that prayer, meditations and collective intentions, over time, can help upgrade consciousness and facilitate positive outcomes for the planetary whole. The essence of hypothesis three is that radiating love and care into the planetary field environment makes it easier for the planet and its inhabitants to shift consciousness and transmute the accumulated negative energy.
We are now at the beginning of a new cycle of solar activity (Solar Cycle 24) which will increase over the next four to six years. There are always pessimistic and fear-based projections related to any new energetic cycles that have an interactive influence with the planet. However, the increasing light and coherence on the planet facilitates new choices and the power to change our responses to energy influences. That's what the global consciousness shift is about: a chance to elect heart-based choices, then take charge and do things differently and respond with more consciousness, respect, love, and compassion. It's time to end the tendency to create and repeat the same old stress-producing “play-outs” each time there is an energy influx on the planet—such as solar activity and other energetic influences—that could bring benefits and creative opportunities to help humanity spiral upward towards the next dimension of active intelligence and heart-based living.

More and more people are realizing that solar and universal energetic influxes are part of a natural cycle—they are not “out to get us”. Their effects depend on how we choose to respond to them. These influxes can be a great add-on to humanity. Yet, people have to take responsibility for their own energy and elect to use this creative energy influx to create deeper connections and more caring interactions with each other and Mother Earth. The Global Coherence Initiative’s intention is to help provide self-transformational tools and technologies that help people align with their higher potentials for empowerment, in order to facilitate positive global change during the influx of this next solar cycle.

Increasing our personal and collective coherence and directing coherent care to areas of need around the world is critical in this new paradigm. GCI staff along with its members and supporters throughout the world believe that as people raise their personal levels of coherent care, then increasing harmony can unfold among people and between people and the environment.

Among the questions GCI researchers hope to answer as the level of global coherence increases in the months and years ahead are whether intentionally-generated increased coherence is able to positively influence negative global conditions such as wars, social unrest, crime and other violence; whether it can help reverse the effects of global warming and lead the world to solutions for healing earth’s ailing environment; whether it can affect the amount or intensity of natural disasters such as earthquakes, hurricanes, volcanic eruptions and tsunamis; and whether it can help human beings find solutions to great challenges such as disease, poverty and shortages of natural resources. Therefore, among GCI’s key long-term research goals are: to correlate coherence-level data collected from the GCI community with changes in the earth’s energetic fields and changes in various social, environmental and health outcomes, and further demonstrate the interconnectedness of all living things.

Preliminary progress already is being made toward achieving these goals. A study currently in process that began in July 2009 is the first of a number of planned membership-based research projects and experiments. Researchers are studying the interconnectedness of humans and planetary field environments. They are doing this by analyzing members’ physical and emotional vitality, social and spiritual connectedness and overall well-being along with various measures of the earth’s energetic systems.

**Heart Coherence: an Optimal State for Creating a Better World**

Heart coherence, which is reflected by a smooth, sine wave like heart-rhythm pattern, is a distinct mode of synchronized psychophysiological functioning associated with sustained positive emotion. It is a state of energetic alignment and cooperation between heart, mind, body and spirit. In coherence, energy is accumulated, not wasted, leaving the individual more energy to manifest intention and harmonious outcomes. Research has already shown that the electromagnetic field generated by the heart radiates out like a radio wave and interacts with other people. GCI researchers theorize that a non-local field can be substantially amplified in groups of coherent individuals, thus expanding the benefits and reach of coherence energy. Today, more people than ever believe meditation, prayer, spiritual and healing practices, affirmations and intentions can affect the world in positive ways. Researchers at the Institute of Heart-Math are exploring how all of these practices can be facilitated by adding heart coherence to have an even greater and lasting impact. The next step is to demonstrate that, collectively, groups of coherent individuals can modulate planetary energetic fields to positively affect the collective consciousness.

A major factor in the global consciousness shift is enough people realizing the need to become more self-responsible for their own energy, thoughts, feelings and actions. It is each person’s responsibility to establish balance within their own self and with the earth. Our view is that every action counts, and
by “taking charge” and increasing our coherence baseline, this shift and consciousness upgrade will be reflected in the global field environment as well. This in turn will create a mutually beneficial feedback loop between human beings and the earth’s energetic systems.

We at the GCI research center feel that using our heart’s intelligence to balance and manage our mental and emotional systems, along with meditations to increase our coherence, will raise our personal frequency pitch and energetically align us with the creative opportunities and benefits that can come with this next cycle of solar activity. More people are becoming aware that they have a choice in how they interact with new energy influxes—be they spiritual, astrological, solar, lunar, environmental or social.

GCI is dedicated to helping individuals, families and groups work together synchronistically and strategically, to increase the impact of their efforts to create positive global change. GCI members worldwide are encouraged through regular communication to personally and collectively practice coherence-building techniques, and participate in GCI experiments and research. They are also asked to send out coherent care, compassion and love to people, crises and areas of need around the planet.

The Global Coherence Initiative is only one of the many emerging groups working to facilitate the planetary shift in these adventuresome and sometimes challenging times. No group is more important than another. With a noncompetitive spirit and genuine care, all groups and individuals add a helpful piece to the grid and are energetically connected to each other at the heart level to serve the greater whole.

We would like to honor and appreciate the Healing Touch community as you offer compassionate care to help so many people around the world. We invite you to join the GCI family and add your heart’s care to this collective initiative to facilitate the planetary shift in these changing times.

About the authors:
Rollin McCraty, Ph.D. of Boulder Creek, California, is the Global Coherence Monitoring System project coordinator. McCraty, who has been with the Institute of HeartMath since its creation in 1991, is IHM’s executive vice president and director of research. A psychophysiologyist, Dr. McCraty’s research interests include the physiology of emotion, with a focus on the mechanisms by which emotions influence cognitive processes, behavior, and health as well as the global energetic effect between people and the earth’s energetic fields. His research has appeared in many journals, including the American Journal of Cardiology, Journal of the American College of Cardiology, Stress Medicine and Biological Psychology. www.heartmath.org

Annette Deyhle, Ph.D. of Boulder Creek, California, is a geologist and marine geochemist. Deyhle is a Global Coherence Initiative team scientist and research coordinator for the Institute of HeartMath. Prior to joining the Global Coherence Initiative (GCI) research team in late 2008, she worked at the Scripps Institution of Oceanography at the University of California, San Diego for five years. Her research there focused on fluid-rock interactions and the chemistry behind earthquakes; plate tectonics; and volcanism. Deyhle participates in GCI research, studying the connection between human health and behavior, the ionosphere and the earth’s magnetic field. She writes science commentaries for the GCI Web site. www.heartmath.org.