

MANY LIVING DIMENSIONS

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The beautiful image that graces the cover of this issue of our journal is *The Bringers of Light*, by Charles Elkind. Charles depicts our living earth—reflected and refracted into multi-faceted rainbow hues, with light showering out along many planes of existence. The papers offered in this issue also explore many dimensions of interaction within and between living beings, and many dimensions of interaction between living beings and our planet.

The first two papers describe new discoveries of electromagnetic processes in living systems with relationship to the earth. The first demonstrates a direct electrical relationship between processes in human physiology and the electrical potential of the ground. The second paper observes pulsed electrical current flows in plant stems that are sensitive to orientation in the earth's magnetic field and also exhibit diurnal cycles.

The third study explores multiple dimensions of healing using an integrative process that combines healing touch with body work movement to intentionally reshape somatic and emotional structures. Remarkable correlations were seen between measures of emotional processes and energetic shifts observed with a physical instrument—the Gas Discharge Visualization camera.

In the fourth paper, a case report proposes energetic interaction between a group of people in meditative practice with a novice in close proximity to the experienced group. And the final paper offers a multidimensional space-time model for understanding out-of-body experiences which might serve as an overarching perspective for many of the layers of being and interaction explored in this issue.

The first paper in this issue posits that the human body evolved while living in direct electrical contact with the earth. Observing that most people seldom now walk directly

on the ground with bare feet, Gaetan Chevalier and Kazuhito Mori explore the effects on human physiology of losing this electrical contact, in *The Effect of Earthing on Human Physiology Part 2: Electrodermal Measurements*.

Subjects assigned to an experimental group were grounded to the earth after a period of baseline recording. The authors call this process *earthing*, to distinguish it from electrical grounding safety methods. Earthing was achieved with electrode patches on the soles of the subjects' feet, connected by a conductive cable to a metal rod planted in the earth. A control group was "sham grounded" for comparison. Part 1 of this study, published in the journal *European Biology and Bioelectromagnetics*, presented results from measurements taken with clinical biofeedback equipment. Here, Part 2 reports data on the same subjects, using Hiroshi Motoyama's AMI (Apparatus for Meridian Identification), with a new method of Single Square Voltage Pulse (SSVP) measurements; obtained at the Jing-Well terminal points of each acupuncture meridian, located adjacent to the nail beds on fingers and toes.

The SSVP assessments corroborate results presented in their first paper with the biofeedback system. Earthing the body produces a reduction in tension (relaxation) of the internal organs and a reduction in inflammation. Chevalier and Mori postulate that the body was developed to take advantage of direct contact with the earth through the feet, by developing a distribution system for electrons through the kidney meridian at KI1. The present findings are consistent with the results of their previous study, which concluded that grounded subjects experienced a reduction in stress and a normalization of the functioning of the autonomic nervous system, with a shift toward parasympathetic function for internal organs after earthing.

The second paper in this issue reports ongoing research over a period of more than fifteen years. W. C. Levensgood and his colleagues have discovered Charge Density Plasmas (CDPs), self-generated electrical pulses in both living and non-living systems: including plants, water, people, animals and soil. Their current paper presents measures and models of these processes in plants and water. In the original paper by Levensgood and Gedye, published in this journal ten years ago, these organized Charge Density Plasmas were historically related to the 1939 work of Harold Saxton Burr. Burr and his colleagues presented a large body of evidence demonstrating that all living organisms possess what was then termed an Electro-Dynamic Field. In a subsequent paper in this journal, Levensgood and Gedye demonstrated that CDP formation in living systems is robustly interactive with enzymatic processes.

Their current study explains the CDP processes with a model of molecular clustering in water isomers. These isomer clusters are organized charge carriers, far more complex than classical electronic conduction. Fine grained measurements show that these CDP forms are

internally generated, self-organized energy systems that are very sensitive to environmental factors. When isomers or clusters form, they interact with background ions in the media and readily produce self-organized plasma pulses that are capable of changing the free energy of the system. CDP pulses propagate differently in the North-South direction than in the East-West direction. These pulses can travel through one another without interference, exhibiting the properties of soliton waves. The pulses also exhibit diurnal cycles, with peaks in the early morning – possibly effected by electron density in the air increasing rapidly at sunrise, another link to planetary environmental effects.

These internally generated, self-organizing Charge Density Plasmas are not the result of chemical, thermal, or mechanical actions triggered by external events or factors. Levenson and Kelly identify these CDPs as a form of subtle energy that is native to both living and non-living systems. They also suggest that these energies point the way toward understanding the interactivity of all things and may reveal new data regarding resilience, homeostasis, and thresholds for transformation.

Each type of tissue in a plant has a distinct CDP signature, and each form of CDP is associated with a distinct micro-plasma. Because of their soliton properties, these micro-plasmas operate without interference to one another. Observation of CDP flows may provide a new picture of living being, as a matrix of interacting plasma fields that are self-organizing, homeostatic, and resilient. For example, CDP changes polarity to the positive (+) range during anabolic processes, and drops into the negative (-) range during catabolism. These conditions may provide a measurable system for assessing the effect of subtle external factors on the subtle energies and homeostasis of a body. The authors further propose that studies of Charge Density Plasmas may reveal new forms of intelligence in other living systems, and subtle interactions with CDPs could perhaps catalyze beneficial physiological transformations.

The third paper, by Geoffrey K. Leigh and Jan W. Cendese, *Investigating the Impact of Integrated Awareness® with Breast Cancer*, explores an integrative and holistic healing modality, to reduce the negative side effects of radiation and chemotherapy, and support women to feel better physically, emotionally, and mentally while being in on-going medical treatment.

Integrated Awareness (IA®) assists people to heal the physical, emotional, mental, and spiritual challenges in their lives through a combination of healing touch, increased awareness, and movement. Accumulated life experiences are revalued, creating kinder meanings and changing habits of perception. Body movement patterns are redesigned, modifying structural support within the body. These changes are aided by both healing touch sessions on a table, and floor movement body work performed in a workshop format.

A randomized treatment group was compared to a control group on several standardized measures. The intervention occurred over a three week period, including three healing touch sessions and a one-day workshop for participants and their primary care-givers. Both groups continued with their prescribed medical treatment.

Six standardized self-reporting instruments were used to evaluate stress, depression, anxiety, loneliness, personal sense of mastery, and a range of quality of life issues.

Participants were also assessed with the Gas Discharge Visualization technology, developed by Konstantin Korotkov and his associates. The GDV provides assessments of energetic body states, using mathematical analysis of digital photographs of light emitted from the finger tips, when the fingers are subjected to low amperage, high voltage pulses.

While the sample of subjects was small in both the control and treatment groups, there were significant differences found in many quality of life indicators. Two of the most common and difficult symptoms presented during the IA[®] sessions were nausea and fatigue. The IA work improved these two symptoms, with significant reductions in the post-test.

The GDV energy assessments support the concept that IA work impacts the energy levels of participants, in addition to their physical, cognitive, and quality of life perspectives. The GDV evaluations showed major shifts in energy over the period of the study, with the treatment group improving on nearly all measures. The fact that few members of the control group participated in the post-test evaluations prohibited a strong comparison between groups on these measures.

The IA method includes a Body's Map of Consciousness, to identify where issues about a person's life are typically held in the body. Of special interest is the consistency of findings between the GDV analysis and the participants' self-reported changes using the IA Body's Map of Consciousness perspectives.

The fourth paper, Eric Leskowitz's report, *The Influence of Group Heart Rhythm on Target Subject Physiology*, provides an example of possible human-to-human energy/information exchange beyond the five physical senses. Using a meditative practice that intends to modify heart rate variability, developed by the Institute of HeartMath, Leskowitz describes apparent interaction in which an unskilled subject's ability to increase a measure called heart rate variability coherence (HRVC) was facilitated, when he was in close proximity to a group of skilled practitioners, who were simultaneously eliciting a state of high HRVC. This single case study provides guidance to improve the research methodology for future studies—under more rigorously controlled conditions, and an

opportunity to explore implications of these results for understanding the nature of anomalous interpersonal interactions and concepts of group energy fields.

Leskowitz discusses possible mechanisms of action, such as local electromagnetic resonance and also non-local, non-electromagnetic processes. Several lines of previous research have demonstrated intentional impacts on target subjects beyond the expected range of electromagnetic effects. Such processes could also have effects in the closer proximity conditions of this study. Leskowitz also extrapolates his discussion, to embrace theories of group field effects being studied with random event generators, using methods developed at the Princeton Engineering Anomalies Research Lab.

In our final paper, Part Two: A Multidimensional Model of the Released State of Consciousness, Christian Hallman extends the space and time model he offered for dreaming, in the previous issue of this journal. Hallman coins the term Released State of Consciousness for experiences that have been called various names; such as soul travel, astral projection, or out-of-body experience. These experiences have been reported among numerous cultures around the world, throughout history. This paper offers a working model of physical aspects of these experiences, by utilizing multiple dimensions of motion, space and time.

In Hallman's model for dreaming, the perceptual processes of sensation and imagination are the energetic driving forces. Here he also emphasizes the perceptual role of emotion for his Released State of Consciousness. The model for dreaming posits a Physical Body using sensations for perception, and a complementary Imaginal Body using imagination for perception. In a Released State of Consciousness, Hallman posits an Emotional Body that corresponds to various concepts found in the literatures on out-of-body experiences; e.g. parasomatic body, and astral body. He pulls together the various strands of description and research on phenomena related to the Emotional Body, such as shamanic shape shifting and evidence that the Emotional Body appears to have physical weight. In this model, the Emotional body can transition to and from the Imaginal and Physical bodies during a released state, by projecting through the upper or lower tiers of the multidimensional space-time world.

Hallman continues his call for studies of State Specific Sciences, emphasizing that many traditions have highly developed intangible (or subjective) and tangible (or objective) technologies for exploring Released States of Consciousness. Concise researches within various States of Consciousness could refine the translation of knowledge and information between these states. For example, biologists might study the anatomy of the Emotional Body, such as the structure of chakras and nadis, more directly by accessing a released state of consciousness. In health and wellness professions, this model supports a holistic,

multidimensional understanding of our bio-physical nature, for guidance through multilayered healing and development processes. Hallman offers this model as a tool with which practitioners can teach their clients how to enhance their physiological, imaginal, and emotional dimensions more effectively, supporting optimal health and well being.

Seen in relation with each other, these papers reflect and refract some of our many living dimensions, so sweetly rendered by Charles Elkind's *The Bringers of Light* on our cover.

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