INSIDE OUT, OUTSIDE IN

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merican Indians punctuate each sweat lodge incantation with, "All my relations!" In the Indian view our "relations" include not only family members past and present, but also all creatures populating both physical reality and the spirit world. As scientists we typically consider "all our relations" in a less personal and less poetic way, yet we base our understanding of nature as it reveals itself to us in the relationships we uncover. In this issue of the Journal our focus in discovering the impact of subtle energies is both internal and external, both personal and universal. Each article explores at least one facet of relationship between inner and outer worlds.

"A Double Blind Study of the 'Biocircuit'" by Julian Isaacs and Terry Patten provides a useful model for how to proceed in testing any putative subtle energy device. The basic procedures used would seem equally useful to consider in evaluating the effects of crystals, magnets, or any of the wide array of instruments, tapes, potions and the like that are widely marketed as influencing subtle energies in total absence of scientific documentation of effectiveness. Thus the authors have provided a service to those with enthusiasm for a given product but no real knowledge of how to go about establishing credibility (beyond placebo effect) for its efficacy. This paper exemplifies studies of the effect of an external object on inner environment, and in this respect, it helps us to extend inner knowing (scientific intuition) into external knowledge (objective evaluation). In "Software for Training Anomalous Cognition" Alan Vaughan and Jack Houck invite us to consider some preliminary steps toward procedures to aid in developing intuition. Their thesis is that effective training of intuition is partly a matter of technique, and that altering the nature of the feedback from "true-false" to an indication of "closeness-to-correct" encourages development of intuition in motivated subjects. The extent to which such learned intuitive skills will generalize to instances where we might wish to apply intuition in our science and in our art will necessarily be the subject of further investigation, but this paper seems to represent a strategic advance in our quest to uncover processes relating inner and outer worlds.

"A Lethal Subtle Energy" by physician E. Stanton Maxey points to the fact that like everything else in our lives, subtle energies can serve us well or ill. In almost telegraphic form we are given a perspective on factors associated with powerline emissions that may affect our health, together with state-of-the-art direction as to what we can do to counteract potentially deleterious effects. Here we see how distortions in the environmental energy fields in which our bodies were developed can impact on the world inside our skins.

Taken as a whole, the contents of the present issue help us to break through the dualism of inside/outside in the world of subtle energies, to realize that the world "inside" our skins, and that "outside," are mirrored perspectives of the same ultimate reality, the same unified field. In that sense, these authors help us to discover our connectedness to, and to refine our definition of, the vast emergent domain of "all our relations."

Concerning the cover: As Lord Adrian indicated in 1961, "New Ideas in science are induced by new discoveries and at the present time it seems to me that the most potent factor in promoting new discoveries has been the introduction of some new technique, some new tool, that could be used for exploring natural phenomena." The digitizing EEG, represented by our cover art, courtesy of Ed Wilson and David Jaffe, is just such a tool for exploring mental states, conscious and unconscious. Researchers have been examining brain maps based on gradations in EEG amplitude (as in the heads on the left side of the cover art) for the last few years. Now the vista of readily constructed images of multi-site coherence of brain rhythms (on the right) promises to reveal undreamed of connections of brain-mind phenomena underlying the

topography of the many states of consciousness and brain activities. As this tool begins to impact on our concepts and our communicated images of ourselves, it is easy to understand the excitement of early cartographers, integrating reports and observations into systematized mappings. We are now on the edge of new understandings of inner states reflected in delicate tracery of modulated electrical fields produced by the brain.

COVER ILLUSTRATION

Brain Wave analysis techniques have improved markedly in the last few years. With these advances, many of our tired old theories are falling apart. The idea that a person is "in Alpha" or "in Theta" is giving way to the concept that we are "in" all EEG frequencies simultaneously, in different areas of the brain. Another theory is that the only significant brain activity occurs below 30Hz; with the advent of rapid acquisition of EEG data (512 samples/sec. in 19 channels) we are able to recognize well organized activity in much higher frequencies in temporal and other "quiet" areas of the brain. Active assault on earlier theories of Hemispheric Lateralization is also occurring. Global coherence analysis reveals rapidly changing patterns of phase synchrony and frequency propagation that may now more accurately reflect neuroanatomic pathways as well as psychophysiologic activity. Now, if we could understand what all these "new truths" mean???

Hats off to David Jaffe, Master Engineer and Programmer, Lexicor Medical Inc., Boulder, CO.

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NEW DIRECTIONS . . .

We live in a world of constant flux where our very identities are determined by the information flows we command. *Subtle Energies* brings us information about the unseen world that surrounds us just beyond the reach of the five senses, but whose imprint marks us indelibly once we feel its touch. We need your help in expanding awareness of the newly emerging field of subtle energy research, and your support in identifying and encouraging submission of reports of exciting new work in this field. As a person with identified interests in this unseen but palpable world, you also likely have contacts with many others of similar interests. You may know of research just reaching the report stage, or nearing readiness to be shared. If so, we ask that you consider supporting *Subtle Energies* by submitting, or by encouraging others to submit, appropriate papers for editorial review.

While we strive for high standards, it is also part of our mission to identify new investigators and projects early on and to encourage communication of emerging results. One example of this interest will be the up-coming issue dedicated to what we can learn from controlled case observations of subtle energies within and around healers, advanced meditators, and ordinary individuals in transition.

Editorial policy and procedural details will be included in the next issue; these are designed to insure timely consideration of all submissions. Given the material already on hand, all is in readiness for us to fill our committment to deliver two additional quality issues of *Subtle Energies* during the remainder of the current calandar year, but we ask your help in our unceasing energetic quest for solid science that is at once informative, provocative, and representative of emerging perceptions of the fundamental nature of subtle energetic transactions.

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