

REVIEW 2

This landmark report, consisting of fifteen papers by recognized researchers from six nations, is a jewel in the crown of Beverly Rubik and her colleagues, whose Center for Frontier Sciences has been steadily building up a reputation since 1987 for solid competent work at the exciting borderlands of the known scientific landscape. The interdisciplinary seminar on which this report is based took place in May 1989, but the papers in this report were either written for the report or were significantly updated for publication in 1992. The authors "brought expertise from mainstream as well as some frontier areas of science, including anthropology, biology, engineering, medicine, parapsychology, philosophy, physics and psychology," to quote from Dr. Rubik's introduction

An important feature of this conference, and a hallmark of Rubik's projects, is that it addresses a subject of breathtaking scope yet is focused so that each paper adds significantly to the topic and none is irrelevant or trivial. After Rubik's overview, Australian humanities professor David Turnbull opens with a discussion of *Maps, Perception and Reality*, discussing how we represent reality with different kinds of maps and what these tell us about the paradigms we develop in science to help us describe the reality of the physical world. Physicist Helmut Schmidt follows with a status report on psychokinesis research, and psychologist Brenda Dunne and engineer Robert Jahn describe the picture of mind-matter interactions and the implications for consciousness that are emerging from their twelve years of work at Princeton.

Walter von Lucadou, from the parapsychology laboratory at Freiburg, tackles the problems posed to physicists by the apparent non-locality of PK and ESP phenomena, and suggests some further experiments that may help resolve this enigma. Ramakrishna Rao departs from his usual role of reporting on laboratory studies at FRNM and elsewhere and gives a highly critical review of the literature on effects of meditation, suggesting ways that this research could be more useful in studying the mind matter-interface.

Frank Putnam, medical researcher at the National Institute of Mental Health, writes about multiple personality disorder (MPD), a topic that in my opinion has been given inadequate attention as a window into the power of the mind to affect the body. Putnam tells that the EEG of each personality has a consistently distinct pattern, as different from the EEG of other personalities as the EEGs of one person differ from another. This means that a patient's EEG can be a reliable indicator as to which personality is "in charge." This discovery has had the kind of effect on MPD research as did the discovery of rapid eye movement (REM) on dream research, giving an objective indication that a particular subjective state has been achieved. Working with patients who can, to varying degrees, control which personality comes to the fore, researchers can then monitor various physiological parameters as also consistent. That is, one can tell from the EEG which particular personality is in charge, and the other physical characteristics are also consistent with that presumption. These physical characteristics may be dramatically different: one personality may be

near-sighted, have asthma, poison-ivy sensitivity, or even diabetes, and show other measurable parameters. In one or two seconds, another personality can be brought up and a wholly new set of characteristics appear! Eyesight may now be 20/120, allergies absent, and even blood chemistry different. Wouldn't we like to know how the mind can cure the body of diabetes or other ills in a second or two?

The report goes on to other provocative research and speculation. Physician Larry Dossey's discussion of the mind's role in healing, and Rubik's report on volitional effects of a bacterial system, working with the late healer Olga Worrall, are followed by Canadian physicist F. David Peat's discussion of *A Science of Harmony and Gentle Action*. Berkeley physicist Henry Stapp and Nobel prize-winner Brian Josephson of the famed Cavendish Laboratory each take a turn at examining the mind-matter problem from the standpoint of quantum physics. Indian philosopher Rajen Mishra and New York psychologist Steven Rosen examine the subject with the particular tools of their own profession, and German biophysicist Fritz-Albert Popp finishes up with a critical review of current theories of evolution and a suggestion as to how some of their inadequacies can be overcome.

The remarkable thing about these papers is that they are written by first-rate scientists, tackling a subject known to lead many serious minds into metaphysical swamps and semantic jungles, yet this particular group of authors has been able to contribute some solid scientific information and ideas into the field. This is what the SSE is all about, and I therefore recommend to the readers of this journal that they take the trouble to look up this report and other material issued by the Center for Frontier Sciences. The management of Temple University, and the foundation established by the late John Fetzer, deserve a great deal of credit for having the insight and the fortitude to support such important work.

Theodore Rockwell
3403 Woolsey Drive
Chevy Chase, MD 20815

A History of Hypnotism by Alan Gauld. Cambridge University Press, 1992, 738 pp. \$140.

Alan Gauld's *History of Hypnotism* is what history of science—especially the scientific study of an anomalous or disputed phenomenon—should be. Many