
It was as an undergraduate, majoring in philosophy at Princeton, that Wilder Penfield first became curious about the brain and the mind. His fascination with the subject is indicated by the title of this, his last scientific work. In it he sets forth his conclusions on the relation between brain and mind, based on a lifetime devoted to the study of neurophysiology from the vantage point of a neurosurgeon.

Penfield’s observations from the electrical stimulation of the temporal cortex of patients under local anaesthesia are well known, particularly those concerning “flashbacks” in memory. Originally Penfield believed that the temporal cortex was responsible for memory, but consideration of the physiologic principles involved in epileptic seizures brought about a revision of this view. The cortical grey matter affected by the current is rendered nonfunctioning, and the response to the stimulation is produced by neuronal conduction along insulated axons to a distant area of grey matter in the higher brain stem or diencephalon.

Occasionally an epileptic discharge, particularly in the temporal lobe, begins locally and spreads to this deep locus of grey matter to bring about a state of automatism. The individual suddenly becomes unconscious but his other cerebral functions continue and he can follow habitual patterns of behaviour, even complex ones. Other functions such as the capacity for making decisions for which there is no precedent and the play of such emotions as contentment, love and compassion are, however, in abeyance. These properties are identifiable as those of the mind, as distinct from the brain.

It is possible, then, to conceive of two distinct mechanisms, both located in the brain stem: the mind mechanism and the automatic sensory–motor mechanism. These are best explained by the computer analogy. The brain is the computer and the mind is the programmer. It is the mind that directs and the brain that executes, bringing about the multitudinous reactions, including speech, that have been learned and recorded in the individual’s past. Penfield rejected the monistic concept of the mind–brain entity accounted for entirely by reflex action. He believed that the mind has energy, but of a form different from that of the neuronal potentials that traverse axonal pathways.

This is a personal book. The author modestly describes the development of his ideas on this extremely difficult subject and provides brief accounts of the clinical cases that advanced him in what he refers to as his pilgrim’s progress. In the final paragraph he alludes to his Christian upbringing, which brings him to the questions of communication between man and God and whether the mind can receive energy from an outside source after death. But this is the book of a scientist, not a metaphysician or theologian, and he withholds his answers.

A W ANDISON, MD, FRCS Canadian Medical Association


The author states in his preface that this book is addressed to general surgeons, accident surgeons and anaesthetists, who are responsible for the primary care of patients with chest injuries. He provides only a superficial review of the topic; it includes general care, with chapters on assessment of patients with chest injuries, management of pain, management of the airway and ventilation, and radiologic features of chest injury and also the care of more specific problems such as traumatic rupture of the diaphragm, esophageal injuries, penetrating wounds and closed injuries of the heart and great vessels and closed injuries of the thoracic aorta. Illustrative case reports and radiographs accompany the text.

Written by a physician with great experience, this book is useful for the medical student and intern, to develop in them an interest in the problems of chest injuries. As a guide for the physician working in the emergency room or intensive care unit, the information contained in the book provides only a framework upon which to build the necessary knowledge.

G. EDELIST, MD, FRCP(C)
Department of anesthesiology
Mount Sinai Hospital
Toronto, ON


This compendium of papers presented at the 4th International Congress of Psychosomatic Obstetrics and Gynecology is a potpourri of individual short papers in English by recognized world authorities. The book discusses the woman as love partner, pregnant person, mother, provider, worker and family leader.

The first section is concerned with family life; it deals with the many stresses on marriage, including ethnic diversity, nonconsummated marriage, abortion and sterility.

Since no subject is taboo, the authors have discussed the psychosomatic aspects of recurrent pelvic pain and vaginismus and controversial topics such as sex counselling, acupuncture analgesia, the management of the seductive patient and artificial insemination by donor.

In an important essay on the family in a changing society the author tries to define the problem areas in modern family life. He discusses the alarming increase in the number of children in broken homes and the sharply increasing rate of wife battering, child battering and infanticide; he expresses concern that there is no formal premarital