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In the history of American neuroscience, the work of Roger W. Sperry stands out as a unique and enduring contribution of enormous influence. This influence extends beyond the field of neuroscience and related areas of cognitive psychology and philosophy of mind, and has altered the popular conception of human consciousness and therefore human nature. In this book, over twenty of his students, research colleagues and scientific friends, themselves all notable scientists, review fifty years of his tireless experimentation and brilliant theoretical argument, and discuss their own work in the context of Sperry's influence on their fields.

Already famous among the biological community in his early thirties for his work on the embryological regulation of growth in neural circuitry, Sperry was led by an intense curiosity about the most difficult questions facing neuroscience, such as those concerning conscious awareness, memory and volition, to the discovery of the split-brain phenomenon, which illuminated the way in which the two halves of the human brain integrate their different functions. In revolutionary tests on patients whose cerebral hemispheres had been disconnected to prevent the build up of severe epileptic seizures, two complementary realms of mind were revealed, one verbal and rational or propositional ("left brain") and the other more spatial, metaphorical and intuitive ("right brain"). He was awarded the Nobel Prize for his work in 1981. He is also a Foreign Member of the Royal Society and has just been inducted into the Soviet Academy of Sciences. Currently an emeritus Professor at the California Institute of Technology in Pasadena, he is active in promoting a new scientific approach to pressing problems of society and policy making, particularly in relation to the impact of a burgeoning human population on an increasingly threatened world ecology. His belief that human consciousness and values find origin in innate structures of the mind guides this teaching.

Although this book is written for students and researchers in the fields of psychology and neuroscience, it will hold interest for any reader who is curious about the workings of the mind and the brain.

Brain Circuits and Functions of the Mind



Essays in Honor of Roger W. Sperry

Edited by
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CAMBRIDGE