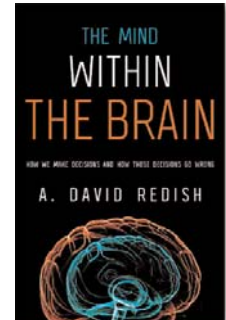


The Mind Within the Brain: How We Make Decisions and How Those Decisions Go Wrong

by David Redish

Hard cover, 23.4x3.3x16.5 cm, 377 pages, ISBN: 978-1118570708; Oxford University Press, 2013

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“Your brain is a decision-making machine, a complex but physical thing. Like any physical process, there are multiple ways in which decisions can go wrong. Being a physical being does not diminish who you are, but it can explain some of the irrational choices you make.” As in this quote from the chapter *The Tale of the Thermostat*, this book details the science behind decision-making in humans, and claims that understanding how the human decision-making works has enormous implications for understanding who we are, what we do, and why we do what we do.

The author A. David Reddish is a distinguished McKnight University Professor in Neuroscience at the University of Minnesota, Twin Cities, USA with expertise on behavior, decision-making and information processing in neural systems.

With an easily readable style, and including personal studies and humor, the author A. David Redish makes the difficult concepts in decision making understandable. The book focuses on how we make decisions, and what is known about how that decision-making can fail under certain conditions to explain irrationality, addiction, and other strange behavior.

The Mind Within the Brain is in four sections: “Decisions and the brain”, “Decision making systems”, “Brain with a mind of its own” and “The human condition.” The first section begins with Redish’s basic definition of a decision: “the selection of actions, and explains how values are determined by multiple interacting systems. The brain is compared to a complex decision-making machine based on negative feedback. The second section focuses on four action-selection systems in decision-making system -

reflexive, Pavlovian, deliberative, and procedural, and four support systems – taking physical action, perception, situation-recognition and motivation. Redish claims that some decisions are made by emotional (Pavlovian) systems, while others are reactive action-chains (procedural), and others taken only after extensive consideration of the options (deliberative) is that each of these systems has advantages and disadvantages. And if you can steer yourself from one system to another at the right time, you can improve your decision-making. The third section *‘The Brain with a Mind of its Own’* explores the consequences of the physical nature of the brain and how mind and brain are related, and dysfunctions in decision making such as addiction and gambling. The fourth section deals with the philosophical questions of what makes us human, morality and free-will.

This book is a clear and concise discussion of what we currently know about brain processes involved in decision making. Clearly written and not too technical, *The Mind Within the Brain* answers a lot of questions about our decision making and offers fresh insight into one of the most complex aspects of human behavior.

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