THE HUMAN MIND


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idiot brain: what your head is really up to

idiot brain by dean burnett is one of the most entertaining educational books I’ve read in a long time. With a background in stand-up comedy and neuroscience, dean burnett is able to take highly technical, academically rich content and make it easily understood. The author has a way of using colorful metaphors to illustrate his examples. “To our brains, daily life is like tightrope-walking over a vast pit full of furious honey badgers and broken glass; one wrong move and you’ll end up as a gruesome mess in temporary but exquisite pain” (p. 28). idiot brain covers a wide variety of topics including regulation of the body by the brain, memory, fear, intelligence, sensory perception, personality, the influence of others on us and us on them, as well as mental diseases and disorders.

idiot brain is well researched and includes fifteen pages of references. The text is a rich discussion of biology (physiology) and psychology. Included are multiple examples of how the brain processes information and how memory works. Burnett uses current examples and cites recent studies. One example is when the author discusses the number of items the average person is able to recall: “refinements and reassessment of legitimate recall and experimental methods have since provided data to show actual capacity is more like four items” (p. 37).

One of the patterns within the book that I appreciated was how frequently idiot brain ties the working of the brain to evolution. Reading this book will make one more aware of the influence of evolution on how certain behaviors and ways of thinking have come about. It had not occurred to me that there were so many aspects of how the brain works that could be influenced by evolution. Something as simple as triggering memories when something is familiar is explained in the light of evolution: “in the harsh reality of the natural world, anything’s familiar is something that didn’t kill you, so you can concentrate on newer things that might. It makes evolutionary sense for the brain to work this way” (p. 50).

When discussing the difference between “intelligent and unintelligent brains,” the author makes logical connections between current assumptions and logic: “One potential factor is something that seems completely wrong: intelligent brains apparently use less power” (p. 136). Intelligent brains have more efficient links and connections and, therefore, use less power. idiot brain is a book that I look forward to using with my students in the classroom. The way the book is written makes it accessible to high school students without minimizing academic language. It could easily be used when teaching how the brain regulates homeostasis, as well as behavior. idiot brain takes a realistic look at how the brain works and how we think without making it seem like one is reading a textbook. The text is down to earth, readable, and entertaining.

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THE PLANET REMADE


Oliver Morton’s book is an outstanding resource for readers who are not climate scientists but who want to gain a deeper and scientifically informed understanding of climate change. The book provides a detailed review of what is known about the many interacting systems and cycles that affect our earth’s climate. The reader comes to appreciate how the earth’s climate is determined through intricately complex and interacting systems that include carbon, nitrogen, and sulfur cycles, the earth’s movement through the solar system, the planet’s geology, and the solar weather. Morton also writes about historic, political, and current social factors that have an impact on why we are facing a climate change crisis.

Within the book’s chapters Morton provides information on possible actions that governments or non-government organizations could take to minimize or even prevent climate change. Some of these actions sound like far-future science fiction, but others are feasible given current technologies. In his discussion of each type of action Morton presents detailed scientific explanations for how the action would work. He also discusses the chances of success as well as economic, cultural, and political considerations.

Sections of the book hold fascinating information about the earth’s climate that make the book...
hard to stop reading, while other sections may be considered to be overly detailed for some readers. For instance, some sections of the book provide detailed descriptions of contributions of individual scientists. This information may be interesting to a scientist working in that particular field of research and who is familiar with the people mentioned, but it can be too much detail for others since these sections don’t add knowledge that helps us understand climate change. On the other hand, the author writes that we already have the technology and knowledge needed to avoid some of the worst consequences of climate change. This is very hopeful information if some of the barriers Morton discusses can be overcome.

Though I have known from my studies in biology that the earth’s climate was a complex interacting combination of different systems and cycles, Morton’s book explains in understandable detail how these systems and cycles work and interact with one another to create the earth’s climate. I now have a better scientific understanding of how and why our planet’s climate is changing and how challenging and important it is to find a solution.

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