Roundup: Quirks and Quibbles

Two books and one TV series explore the oddities of the human mind.

Extraordinarily complex as the human brain may be, it is far from perfect. Human memory is unreliable; we are easily swayed by advertisements; and we tend to hold fast to superstitions. In his new book **Brain Bugs: How the Brain's Flaws Shape Our Lives** (W. W. Norton, 2011), neuroscientist Dean Buonomano explores these neural "bugs," delving into studies that reveal why the brain may have developed some of its quirks.

Is it possible to directly observe the brain at work? In a thought-provoking read, psychologists Paolo Legrenzi and Carlo Umilta argue that the public has become unduly obsessed with brain imaging. **Neuromania: On the Limits of Brain Science** (Oxford University Press, 2011) debunks the budding idea that a study or news report accompanied by a colorful brain image is more reliable than research that does not use flashy functional MRI technology.

Have you ever been curious to see the world through a newborn's eyes? Now you can come close. The PBS series **The Secret Life of the Brain** (with clips available online at www.pbs.org) takes viewers on a ride through the developing human brain, from birth to death. For instance, viewers will learn that only four weeks into gestation neurons are already forming at a rapid rate of 250,000 per minute and that our brains continue to produce new neurons even into our seventies. —*Victoria Stern*

physical distance, language or expertise can now be bridged with a backlit screen and a few mouse clicks. Through a series of anecdotes, she asserts that the true trailblazers of this shifting landscape, from small-town teachers to key players in giant corporations, are those melding skills needed online with those that serve both the classroom and the workplace. It is impossible to pay attention to everything at once, but by collaborating-sharing links on our favorite social media sites or working together in a multiplayer role-playing game-we learn how powerful the wisdom of the group can be.

Although the book provides glimpses of the brain's inner workings, *Now You See It* is not for those readers seeking the latest insight into the neuroscience of learning or attention. In fact, most of Davidson's explanations are oversimplified. But dismissing the book on those grounds alone would be shortsighted.

The book's purpose and strength are in detailing the important lessons we can glean from the online world. Rather than focusing on how games such as World of Warcraft or the socialnetworking services of Twitter and Facebook change our brains, Davidson believes we should foster these newfound skills, building curricula around interactive multiplayer games and training workers using virtual environments.

If Davidson is right, 21st-century society will move away from categorizing people based on standardized tests, which are crude measures of intelligence at best. Instead we will define new metrics, ones that are better aligned with the skills needed to succeed in the shifting global marketplace. And those who cannot embrace this multidisciplinary world will simply be left behind. —*Brian Mossop*

NEVER MIND



The Mind: Leading Scientists Explore the Brain, Memory, Consciousness, and Personality

Edited by John Brockman. Harper Perennial, 2011 (\$14.99)

As a research psychologist, when I see a book

that claims to reveal "everything you need to know about the mind," I keep my hopes up and my expectations low.

This new book, edited by legendary literary agent John Brockman, dashed most of my hopes. It contains conversations with 16 prominent neuroscientists, biologists and psychologists, but only one is female—a clue about one of the book's flaws, namely, that much of its content is obsolete.

In the first chapter, for example, in a chat between Brockman and psychologist Steven Pinker of Harvard University, Pinker complains about theories of mind that are "decades out-of-date" while advancing an information-processing theory of



the brain that is also out-of-date. This gaffe can be explained, perhaps, by the fact that the interview took place in 1997. Since that time, great strides have been made in neuroscience, which has gradually been coming to grips with the fact that the brain works *nothing* like a computer, contrary to Pinker's assertions. Fully half the interviews in this book took place in the 1990s—a serious problem when one is looking at one of the fastest-moving fields in all the sciences.

Also troubling, every chapter has long been available in unedited form on Brockman's Web site, Edge.org, created to be a forum where outstanding scholars and scientists could interact. As one might expect, the experts featured in the book are often talking to *one another*, not to the general public.

The biggest problem with the book, however, has to do with the diversity of topics it tackles. Eight of the book's 18 chapters say nothing about either brain or mind, focusing instead on topics such as birth order, morality and even protozoan parasites. How these various forays are related to either mind or each other is unclear.

These negatives notwithstanding, if you want a quick introduction to some of the smartest and most interesting thinkers around—Stanislas Dehaene of the Collège de France in Paris, Vilayanur S. Ramachandran of the University of California, San Diego, Steven Rose of the Open University in Milton Keynes, England, and others—read this book or simply click on Edge.org. —*Robert Epstein*