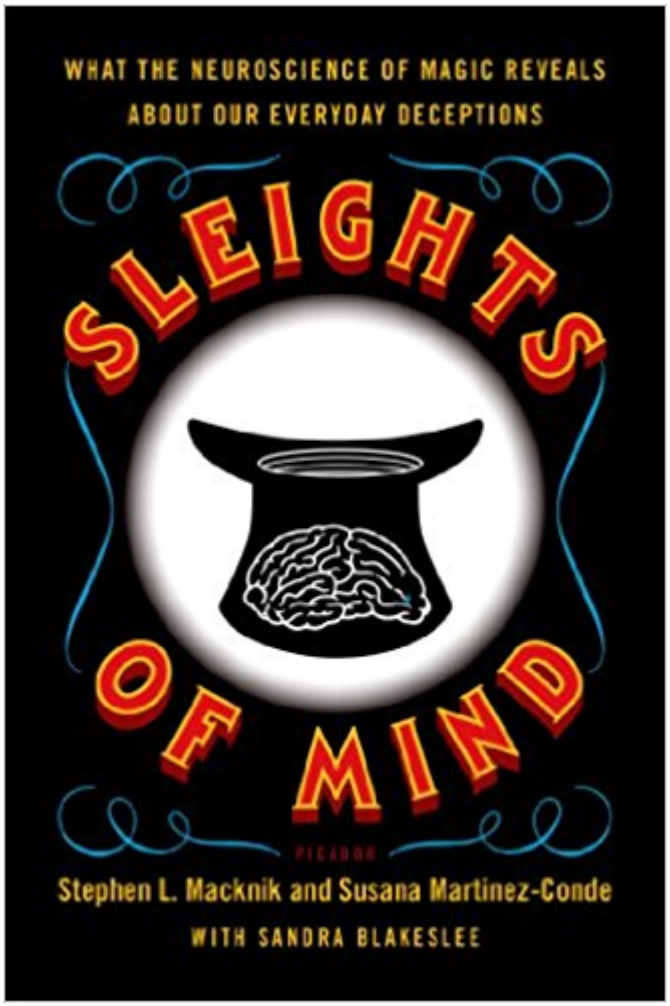
Ebook Directory
the best source of ebook

The book was found

Sleights Of Mind: What The Neuroscience Of Magic Reveals About Our Everyday Deceptions



PDF
Adobe
DOWNLOAD EBOOK

Synopsis

Stephen Macknik and Susana Martinez-Conde, the founders of the exciting new discipline of neuromagic, have convinced some of the world's greatest magicians to allow scientists to study their techniques for tricking the brain. The implications of neuromagic go beyond illuminating our behavior; early research points to new approaches for everything from the diagnosis of autism to marketing techniques and education. Fun and accessible, Sleights of Mind is "a tour through consciousness, attention, and deception via the marriage of professional magic and cognitive neuroscience" (Vanessa Schipani, The Scientist).

Book Information

Paperback: 291 pages

Publisher: Picador; Reprint edition (November 22, 2011)

Language: English

ISBN-10: 0312611676

ISBN-13: 978-0312611675

Product Dimensions: 6.2 x 0.8 x 9.3 inches

Shipping Weight: 11.2 ounces (View shipping rates and policies)

Average Customer Review: 4.3 out of 5 stars 90 customer reviews

Best Sellers Rank: #250,120 in Books (See Top 100 in Books) #60 inÃ Â Books > Arts & Photography > Performing Arts > Magic & Illusion #83 inÃ Â Books > Humor & Entertainment > Puzzles & Games > Magic #422 inÃ Â Books > Medical Books > Medicine > Internal Medicine > Neurology > Neuroscience

Customer Reviews

Ã¢â ¬Å“Sleights of Mind makes brain science so much fun, you'll swear the authors are as clever as Houdini.Ã¢â ¬Â• Ã¢â ¬â ¢Scientific American Book ClubÃ¢â ¬Å“Magic is the place where our senses and beliefs fail us in magnificent ways. In this exciting book Stephen, Susana, and Sandra explore what magic and illusions can teach us about our fallible human nature--coming up with novel and fascinating observations.Ã¢â ¬Â• Ã¢â ¬â ¢Dan Ariely, author of Predictability IrrationalÃ¢â ¬Å“Steve and Susana are two of the most innovative scientists I know. They aren't content to just conduct elegant experiments (although they do plenty of those, too). Instead, they're determined to explore those places where neuroscience intersects the mysterious and the magical, from visual illusions to Vegas card tricks. This book doesn't just change the way you think about sleight of hand and David Copperfield - it will also change the way you think about the

mind.Ã¢â ¬Â• Ã¢â ¬â ¢Jonah Lehrer, author of How We Decide and Proust Was A Neuroscientist.Ã¢â ¬Å“I've long wished that there was a book that explained the art of magic from the point of view of cognitive neuroscience. Magic is a goldmine of information about the brain, as well as a source of fascination to laypeople. This is the book we've all been waiting for.Ã¢â ¬Â• Ã¢â ¬â ¢Steven Pinker PhD, author of The Stuff of ThoughtÃ¢â ¬Å“This is a highly original book. Science and magic have much in common. They both take seemingly inexplicable events and provide elegantly simple answers that enthrall the observer. The authors have done an admirable job in exploring this idea and also suggest ways in which the two disciplines can cross fertilize each other.Ã¢â ¬Â• Ã¢â ¬â ¢VS Ramachandran MD PhD, author of Phantoms in the BrainÃ¢â ¬Å“Stephen Macknik and Susana Martinez-Conde's Sleights of Mind gives non-magicians a real up-close look at the true secrets of magic. They are revealing the real knowledge jealously guarded by all great performers...I know my fellow magicians are all going to be as jazzed as I am to read about how sophisticated magical techniques and state-of-the-art brain science combine.Ã¢â ¬Â• Ã¢â ¬â ¢Mac King, headliner, Harrah's Las VegasÃ¢â ¬Å“In Sleights of Mind, authors Stephen Macknik and Susana Martinez-Conde persistently remind us that the human mind is a bad data-taking device. And it's this fact that enables the science of magic to exist at all.Ã¢â ¬Â• Ã¢â ¬â ¢Neil deGrasse Tyson, author of The Pluto FilesÃ¢â ¬Å“The authors make easily comprehensible the effects of neural adaptation, afterimages, occlusion, perspective, saccades, inattentional blindness, expectations and the pliability of memory...Entertaining.Ã¢â ¬Â• Ã¢â ¬â ¢KirkusÃ¢â ¬Å“In their illuminating book, brain experts Martinez-Conde and Macknik make their case that magicians are some of the most skilled neuroscientists around...By tricking readers into having fun learning neuroscience, the authors bring the newly minted field of "neuromagic" to center stage.Ã¢â ¬Â• Ã¢â ¬â ¢Laura Sanders, Science NewsÃ¢â ¬Å“This book offers 'a revolutionary look a the science behind magic--what leads the mind to believe tricks are real and how magicians actually use the brain's own logic to acheive this.'Ã¢â ¬Â• Ã¢â ¬â ¢Phillip Manning, Science Book NewsÃ¢â ¬Å“If you want to learn more about "neuromagic," take a peek at Macknik and Martinez-Conde's most recent book. It explains how they've investigated the tricks of some of the world's greatest magicians to find out how the brain works in everyday situations. It's a great read whether you're passionate about brain science, magic, or both!Ã¢â ¬Â• Ã¢â ¬â ¢Odyssey Magazine (Editor's Choice)

Stephen L. Macknik, Ph.D., is Director of the Laboratory of Behavioral Neurophysiology at the Barrow Neurological Institute in Phoenix, Arizona. Susana Martinez-Conde, Ph.D., is Director of the

Laboratory of Visual Neuroscience at BNI. Sandra Blakeslee is a regular contributor to "Science Times" at The New York Times who specializes in the brain sciences, and the author of several books.

You'd think magicians could learn a thing or two from neuroscientists, but this book is all about how two neuroscientists are learning what to study and why from professional magicians. Sleights of Mind is a fun layman's read of how our vision works and how our minds interpret what we see. I wasn't a magic fan nor a neuroscience fan when I started this book, but I am now! I learned why, when I edit my writing, I miss so many errors. I don't see them! My mind is conjuring up what the words are supposed to be, because that's how our minds have evolved to be more efficient. We have a limited range of focus when we see, too, and surrounding neurons are "turned off."I finished this book with a greater respect for magicians not only for their skill, but also for what they've known for ages about the human mind, things neuroscientists are just discovering. I also learned, if I'm ever on a jury, not to put too much weight into eye witnesses' testimonies. Nothing can deceive us like our own minds!

Sleights of Mind explains magic tricks by telling one about the shortcuts, limits, and programming of brain (and attendant sensory systems) that facilitate such tricks. The reader neednÃƒÂ¢Ã â ¬Ã â„¢t be concerned that the book will spoil all the illusionistsÃƒÂ¢Ã â ¬Ã â„¢ secrets for one. The authors carefully demarcate the beginnings and endings of spoiler sections that explicitly explain tricks. This allows a reader to skip over such sections if one doesnÃƒÂ¢Ã â ¬Ã â„¢t want to know the trick. I suspect few readers do skip the spoiler sections because thatÃƒÂ¢Ã â ¬Ã â„¢s where the rubber meets the road in terms of the neuroscientific concepts being discussed. The spoiler sections are an attempt to comply with the magicianÃƒÂ¢Ã â ¬Ã â„¢s code (the neuroscientist authors became magicians themselves) and to maintain a good relationships with the many magicians (some, like Teller or the Amaz!ng Randi, quite famous) who cooperated in the writing of the book.Over 12 chapters, the authors explain the neuroscience of how various classes of illusion work. Most of the chapters address a specific class or subclass of illusion. The first few chapters deal with visual illusions. We look at the world in what seems like crystal clarity (at least with glasses on or contacts in), but there are many limitations and gaps in our visual processing system. While it seems like we are directly seeing the world around us, in point of fact, our visual experience is a product of the brain reconstructing information that the eyes take inÃƒÂ¢Ã â ¬Ã â •and it doesnÃƒÂ¢Ã â ¬Ã â„¢t do it as perfectly as our brain tricks us

into believing. As the authors state it, ÃƒÂ¢Ã â ¬Ã Å“The spooky truth is that your brain constructs reality, visual and otherwise.ÃƒÂ¢Ã â ¬Ã Â• Chapter 3, deals with illusion in art, which is little outside the theme of the book, but it offers an opportunity to explain some intriguing facts about how the brain and eyes work in concert.The next couple chapters (Ch. 4 and 5) deal with cognitive illusions. Just like our visual system, our conscious minds save energy by engaging in short-cuts that disguise the mindÃƒÂ¢Ã â ¬Ã â„¢s limits while offering the possibility of manipulation. The brain also works hard to reconcile what appear to be inconsistencies, and often this reconciliation leads us astray. Misdirection is discussed in detail. Our minds are primed to let certain actions and sensory inputs draw its attention, and humans are awful at paying attention to more than one input stream at a time. Teller explains that, ÃƒÂ¢Ã â ¬Ã Å“Action is motion with a purpose.ÃƒÂ¢Ã â ¬Ã Â• So, if one can give oneÃƒÂ¢Ã â ¬Ã â„¢s movement a purpose (even scratching oneÃƒÂ¢Ã â ¬Ã â„¢s chin) it will be ignored while movements seemingly without purpose are anomalous and draw attention. The authors introduce the reader to mirror neuronsÃƒÂ¢Ã â ¬Ã â •the part of our brains that take observations of anotherÃƒÂ¢Ã â ¬Ã â„¢s actions and makes forecasts about that personÃƒÂ¢Ã â ¬Ã â„¢s intent. This system is highly hackable by magicians.Chapter 5 informs us that we arenÃƒÂ¢Ã â ¬Ã â„¢t as good at multitasking as we thinkÃƒÂ¢Ã â ¬Ã â •which is to say we completely stink at it but tend to think we are awesome multitaskers. The gorilla experiment is offered as a prime example of this situation. In the gorilla experiment, about half-a-dozen people, moving around randomly, pass a ball / balls among themselves. The subject is asked to count the number of passes. In the middle of this activity a man in a gorilla suit walks through the middle of the rapidly moving passers. When asked whether they saw the gorilla, most people say they didnÃƒÂ¢Ã â ¬Ã â„¢t (and those who do see the gorilla invariably offer a count of passes that is vastly off the mark.) [If this is either unclear or unbelievable, you can YouTube it.]Chapter 6 examines multisensory illusions. The quintessential example is how our brains lead us believe that the sound of a ventriloquistÃƒÂ¢Ã â ¬Ã â„¢s voice is coming from the moving lips of a dummy. (Also, it seems like voices are coming from the lips of actors on screen in the movies, even though the speakers are probably off to the side in the walls or ceiling.) Synesthesia (cross-wiring between senses and brain such that some people may always see the number 5 in red or hear a C-sharp in green) is introduced to the reader.Chapter 7 explores the illusions of memory. Just as with our vision and attention, our memories arenÃƒÂ¢Ã â ¬Ã â„¢t as indelible as they seem to be. We think weÃƒÂ¢Ã â ¬Ã â„¢re calling up a transcription of the events of our lives, but really weÃƒÂ¢Ã â ¬Ã â„¢re remembering the last remembrance of said event. This can lead to a migration / distortion of events in the same manner as the kidÃƒÂ¢Ã â ¬Ã â„¢s

experiment whereby one whispers a phrase into the ear of the kid in the next chair and it traverses the classroom. The original sentence ÃƒÂ¢Ã â ¬Ã Å“The cat is on the windowsillÃƒÂ¢Ã â ¬Ã Â• invariably becomes something like ÃƒÂ¢Ã â ¬Ã Å“Lenny Kravitz steals puppies from the till.ÃƒÂ¢Ã â ¬Ã Â• (Have you ever experienced a situation in which a person remembers the details of an event substantially differently from yourself even if the broad brushstrokes are the same?) Some entertainers use pneumonic tricks to convince audiences that they have supernatural mental abilities whenÃƒÂ¢Ã â ¬Ã â •in factÃƒÂ¢Ã â ¬Ã â •they have merely turned understanding of memory to their advantage.Chapter 8 considers how in-built expectations and assumptions are exploited by magicians and mentalists. Again, these methods work because our brains employ all sorts of energy-saving shortcuts. For example, our brains often do the same thing as GoogleÃƒÂ¢Ã â ¬Ã â„¢s search engineÃƒÂ¢Ã â ¬Ã â •filling in the blanks by taking advantage of oneÃƒÂ¢Ã â ¬Ã â„¢s experience to avoid the need for costly cognitive processing.Chapter 9 explains that our ÃƒÂ¢Ã â ¬Ã Å“free choicesÃƒÂ¢Ã â ¬Ã Â• are often not so ÃƒÂ¢Ã â ¬Ã Å“freeÃƒÂ¢Ã â ¬Ã Â• as we think. One of the most disconcerting, yet intriguing, facts to come from the onslaught of brain imaging studies since the 1990ÃƒÂ¢Ã â ¬Ã â„¢s is that our decisions are made on a subconscious level before our conscious minds are even aware the decision has been made. Prior to this, weÃƒÂ¢Ã â ¬Ã â„¢d always been under the misapprehension that we are consciously making all these decisions--big and small--because the conscious mind is just a big credit stealer (to be fair, the conscious mind doesnÃƒÂ¢Ã â ¬Ã â„¢t recognize that itÃƒÂ¢Ã â ¬Ã â„¢s so out of the loop in decision making.) So many of our decisions are made in predictable ways by emotional / automated responses, and mentalists use that fact to their advantage.Chapter 10 is a catchall for topics that didnÃƒÂ¢Ã â ¬Ã â„¢t fit into earlier chapters, including hypnosis, superstitions, and the gamblerÃƒÂ¢Ã â ¬Ã â„¢s fallacy (i.e. the idea that a roulette number that hasnÃƒÂ¢Ã â ¬Ã â„¢t come up in a while [or slot machine that hasnÃƒÂ¢Ã â ¬Ã â„¢t paid off recently] is bound to pay soonÃƒÂ¢Ã â ¬Ã â •regardless of the probability distribution that actually rules the outcome.)The remainder of the book tells the story of the authorÃƒÂ¢Ã â ¬Ã â„¢s try-out for a magic society and discusses the question of whether knowing the neurological and psychological roots of magic tricks will kill magic as a source of entertainment. I found the latter to be the more interesting discussion. The authors are optimistic about magicÃƒÂ¢Ã â ¬Ã â„¢s survival, and offer good reasons. After all, almost nobody believes that magicians are conducting supernatural activities [not even people who take some wildly unsubstantiated beliefs as givens.] Even knowing how the tricks work doesnÃƒÂ¢Ã â ¬Ã â„¢t create the ability to see through the tricks because so many of the factors that magicians exploit

operate on a subconsciously programmed level, and such proclivities would have to be trained away. People who want to enjoy the spectacle of magic arenÃƒÂ¢Ã â ¬Ã â„¢t likely to go to the trouble of training themselves in that way.I enjoyed this book even though IÃƒÂ¢Ã â ¬Ã â„¢m not particularly a fan of magicÃƒÂ¢Ã â ¬Ã â though I did find myself watching quite a few YouTube clips of the magicians mentioned in the book. If youÃƒÂ¢Ã â ¬Ã â„¢re interested in how oneÃƒÂ¢Ã â ¬Ã â„¢s mind and sensory systems work, and the limitations of those systems, youÃƒÂ¢Ã â ¬Ã â„¢ll find this book worthwhile. If youÃƒÂ¢Ã â ¬Ã â„¢re into magic, youÃƒÂ¢Ã â ¬Ã â„¢ll like it all the more so.

A well-presented treatise on how neuro-science is revealing the how and why we perceive our surroundings as we do. If you are interested in Psychology, Neurology, and Psychiatry, you will find this book interesting. This is not a medical text, so, the average student of the mind-sciences should be able to comprehend it without difficulty. For example, I have a Master's Degree in Clinical Social Work and I had no difficulty with the concepts. The useful novelty of this book is that the authors recognized how the profession of magical-entertainment is all about tricking the perceptions of the audience. So, by bringing together what neuro-science shows us about the how and why we perceive as we do and contrasting it with magical techniques, we gain a clearer picture of how our minds work. Fascinating!

While this book is not simple simply put this book is about how our mind perceives (underscore perceives) the physical world around us primarily through the integration of our visual system in combination with other systems. The primary way that this is explored is, voila! through the art and spectacle of magic (but strictly defined as those practitioners who deal in illusions, sleights, and memory and expectational manipulations; this is not to be confused by the hucksters who claim supernatural power or innate abilities to seemingly defy reality).I was tempted to end my review at that summary sentence but...nah, I'll go on. "Sleights of Mind" was researched and written by a scientific husband and wife duo (Susana Martinez-Conde, Ph.D., director of the Laboratory of Visual Neuroscience at BNI and her husband, Stephen Macknik, Ph.D., is the director of the Laboratory of Behavioral Neurophysiology at Barrow Neurological Institute) and, while many of the concepts are clear if not completely concise and the writing flows (if you don't stop and read shadowed blocks that are interesting asides about applications or examples of what they're currently talking about), the technical jargon is kept to a minimum and much of what is said could have been said in shorter or condensed form. But here we have what the duo no doubt experienced repeatedly and highlight

and that is that magic and illusions are just as much about showmanship and misdirection as they are about the tricks of the trades themselves. As such Macknik and Conde include healthy portions of schtick, describing in detail quite a few illusionists from the way that they dress and present themselves to their audiences visually as well as mannerisms that they employ and jokes that they use. While I was expecting that the most interesting part of the book would be finding out about how our brain works it turns out that the discussions of the magicians/ illusionists was for me the most interesting.Conde & Macknik also go to lengths to describe how the magic is accomplished, giving many "spoiler alerts". Perhaps it was just me but I couldn't wrap my head around many of the tricks that they were describing as I couldn't adequately visually picture them based on the descriptions. I wonder if other people had the same experience?Overall I was very glad to have purchased this book. I work in the field of psychology with adolescents and some of the information herein has been helpful in that it can help me point out more concrete ways in which their information systems can foul them (and others) up and how we can possibly avoid this sometimes by increasing our awareness of such phenomena. But I didn't come away having learned anything really substantially new about neuroscience (now about magic, I did) and in that I was a little disappointed. Still, an enjoyable read, not overly technical, and fairly highly recommended.* One last note: Though not their primary purpose in writing this book Macknik & Conde present themselves not just as skeptics of the highest order, demythologizing "magic", but as worshippers of the material sciences and devout believers that there are no actual supernatural or spiritual (as in suggesting another realm or reality outside of the material world); they believe that through dedicated study and practice the secrets of the universe can be unlocked and that there are no secrets outside of the material universe. They don't state this outright anywhere but these assumptions are presented clearly enough in a number of ways and are taken for granted by the authors. This is not surprising. But if you are a believer (you have a religious worldview of some sort, such as being Muslim or Buddhist or Christian, or if you simply believe in a non-materialistic spiritual realm and are strongly influenced by horoscopes or psychics) you might be set back or bothered a little by some of their presentations or assertions.

Download to continue reading...

Sleights of Mind: What the Neuroscience of Magic Reveals about Our Everyday Deceptions Magic Cards: Magic the Gathering - 33 Killer Tips from a Magic Master! (Magic Cards, Magic the Gathering, Magic Decks, Magic the Gathering Tips, Magic Card Tips, How to Play Magic, Magic) Modern Coin Magic: 116 Coin Sleights and 236 Coin Tricks The Mind-Gut Connection: How the Hidden Conversation Within Our Bodies Impacts Our Mood, Our Choices, and Our Overall Health

Clinical Neuroanatomy and Neuroscience: With STUDENT CONSULT Access, 6e (Fitzgerald, Clincal Neuroanatomy and Neuroscience) 6th (sixth) Edition by FitzGerald MD PhD DSC MRIA, M. J. T., Gruener MD MBA, Gr [2011] Fundamental Neuroscience, Fourth Edition (Squire,Fundamental Neuroscience) Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems (Computational Neuroscience Series) The Cognitive Neuroscience of Vision (Fundamentals of Cognitive Neuroscience) What the F: What Swearing Reveals About Our Language, Our Brains, and Ourselves Wicca Magic Starter Kit: Candle Magic, Crystal Magic, and Herbal Magic Master Your Mind: Achieve Greatness by Powering Your Subconscious Mind [mental power, mind control, thought control] (brain power, subconcious mind power, NLP, Neuro Linguistic Programming) Fatal Deceptions: Three True Crime Tales of Passion, Murder, and Deceit Don't Get Fooled!: How to Analyze Claims for Fallacies, Biases, and Other Deceptions Satan's Deadly Trio: Defeating the Deceptions of Jezebel, Religion and Witchcraft Beware of Angels: Deceptions in the Last Days Deliverance From Python Spirit: Powerful Prayers to Defeat the Python Spirit Ã¢â ¬â œ Spirit of Lies, Deceptions and Oppression. (Deliverance Series Book 3) Dance Recital Journal Love Everyday Laugh Everyday Dance Everyday: Lined Notebook for Girls, Perfect Gift for Dancers ~ Unique Inspirational Quote Diary for Dance Students, Teacher A History of Everyday Life in Scotland, 1600-1800: A History of Everyday Life in Scotland, 1600 to 1800 (A History of Everyday Life in Scotland EUP) Altered Traits: Science Reveals How Meditation Changes Your Mind, Brain, and Body Talking Hands: What Sign Language Reveals About the Mind

Contact Us

DMCA

Privacy

FAQ & Help