

appraisal); and Step 4: Employ the results in your practice (or not, I suppose). The 4 steps describe and explain in sufficient detail the main concepts and processes that are used by teachers and practitioners of evidence-based medicine.

It is the same kind of material that we use as hand-outs for students or at workshops. It is based on the approach and content developed and presented by the Oxford and McMaster groups who have written the current definitive texts on this subject.^{1,2} That fact is a 2-edged sword: it means this book is based on a solid foundation of how evidence-based medicine has been developed and is understood; it also means there are not really any new concepts or ways of understanding and using evidence-based medicine presented in the book. However, I think the latter was not the author's intent, rather, I think his intent was to put the basics of the evidence-based medicine process together into a concise and small handbook that learners and practitioners alike could easily carry around and access when needed. In this regard, the book is quite a success.

The other feature of the book is the Sherlock Holmes quotes, anecdotes and metaphors. The purpose, I think, is to link the identification and use of evidence with the deductive reasoning of Sherlock Holmes, in an attempt to make the case that they are somehow similar, and can help us better understand the evidence-based medicine process. I don't think it works very well in that regard. There are very few direct links between the evidence-based medicine content and the juxtaposed Sherlock Holmes content that enlightens the understanding of either. Having said that, it does make the book more interesting and gives the reader frequent little breaks. I didn't mind it. In fact I liked it; I just didn't find it helped much with understanding the evidence-based medicine content. Maybe others will.

This book will help both the teacher and the student of evidence-based medicine. As a teacher I could use this book as a recommended text instead of providing hand-outs. Students would find it much easier to carry around and not as dry as the content of most hand-outs. However it is not a substitute for Sackett et al.'s "bible."¹ For the true disciples of evidence-based medicine, that book still

needs to be read and digested. However as a quick reference and for those who want "just the facts," Nordenstrom's book meets a need.

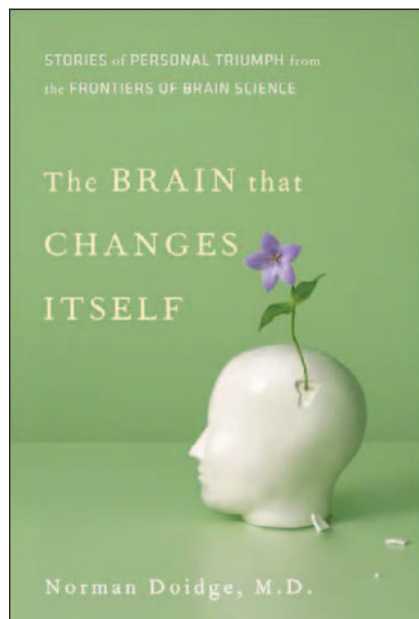
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Hope springs eternal in the human brain



The Brain that Changes Itself: Stories of Personal Triumph from the Frontiers of Brain Science

Norman Doidge
Penguin Group, 2007
448 pp. \$31.00 ISBN: 978-0-670-03830-5

Patients who read this popular book will have some searching questions for their physicians, especially when they or a family member are facing challenging physical or cognitive rehabilitation problems.

Dr. Norman Doidge, clearly a keen student of history and biography, traces the origins of ideas that the brain is capable of self-modification to the ancient Greeks and to the philosopher Jean-Jacques Rousseau. Doidge is an enthusiastic proponent of this fascinating area of neuroscience and portrays the courage of several determined research scientists who faced antagonism, ridicule and even repeated litigation for their efforts.

He writes: "The idea of the brain as plastic [that it can change itself physically and functionally at any age] has appeared in previous times, in flashes, then disappeared. But even though it is only now being established as a fact in mainstream science, these earlier appearances left their traces and made possible a receptivity to the idea, in spite of the enormous opposition each of the neuroplasticians faced from fellow scientists."¹

This book will encourage curiosity, open-mindedness and hope, as well as provide an annotated bibliography for readers who wish to locate some of the pioneering articles.

With recent advances in molecular biology, human genome mapping and functional medical imaging, the scientific study of neuroplasticity is bound to be fertile ground for Nobel prizes. The recent discovery that neural progenitor cells remain in the brain and spinal cord of adults, where they have the capacity to re-populate specific regions, is very promising and has the potential to lead to major changes in rehabilitation medicine, neurology and psychiatry. Whether the resources will be allocated to deal with developmental disorders in children, and change approaches to early childhood care and education, as well as cognitive preservation in seniors, remains to be seen.

Aspects of neuroplasticity covered in this book include:

- Tactile feedback enabling congenitally blind individuals to "see."
- A description of the successful rehabilitation of the Catalan scholar Pedro Bach-y-Rita, with pathology findings confirming that a "late" recovery could occur even after a massive lesion in this elderly person.
- Special education approaches to severe learning disabilities and autism.
- Brain mapping experiments that

disprove traditional localizationist theories of the brain being “hard-wired,” and outline the importance of “critical periods” in brain function development.

- Obsessive–compulsive disorder conceptualized as “brain lock,” and new strategies for psychotherapy.
- “Phantom limb” pain, its prevention and treatment.

On the negative side, some of the chapter headings seem somewhat sensationalistic and the book relies heavily on anecdotal accounts. The latter are persuasive about the results achievable by determined individuals, but may disappoint scholars of evidence-based medicine (who may, in their skepticism, miss the comments about fMRI confirmation of lasting changes in brain function that accompany a number of these cases). In addition, the use of patients’ case histories, even with consent and without identifying information, raises some ethical issues that cannot be set aside simply because the book is well-intentioned.

However, this book may well make us ponder on how politics, pride and shame can delay the recognition of important scientific advances and the research that would provide evidence for their effective use in clinical care.

In a second edition, perhaps the author will provide an improved annotated bibliography containing hyperlinks to abstracts of articles catalogued by PubMed, and suggestions for curriculum changes for medical and nursing schools, rehabilitation medicine and elementary teacher education (see online appendix at www.cmaj.ca/cgi/content/full/177/12/1552/DC1).

As work proceeds on the possible introduction of a developmental trauma disorder diagnosis in the next *Diagnostic and Statistical Manual of Mental Disorders* (expected in 2012), I would have preferred to see a focus on this disorder, rather than an extended section on psychoanalysis as “neuroplastic microsurgery.” When we consider the number of children affected worldwide by poverty, war, childhood abuse and terrorism, and the posttraumatic consequences of these, we need to emphasize science-based, effective and accessible treatment approaches.

Overall, highly recommended; if you choose not to read it yourself, please

consider donating a copy to your local medical library or medical school curriculum coordinator.

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Body: know thyself



Beyond the Body Proper: Reading the Anthropology of Material Life

Margaret Lock and Judith Farquhar, editors
Duke University Press; 2007
688 pp. \$34.95 ISBN: 978-0-8223-3845-1

Writing a coherent review of *Beyond the Body Proper* is a difficult task, given that it is a collection of articles discussing multiple aspects of our perception of the biological, as well as the interrelation between mind and body, known as *embodiment*. With titles as diverse as “We Always Make Love with Worlds,” “Woman Mystics and Eucharistic Devotion in the Thirteenth Century,” “National Bodies, Unspeakable Acts: The Sexual Politics of Colonial Policy Making,” “The Egg and Sperm: How Sci-

ence Has Constructed a Romance Based on Stereotypical Male–Female Roles” and “Quit Snivelling Cryo-Baby, We’ll Work Out Which One’s Your Mama,” it needed a good editor to make sense of it all.

Fortunately, medical anthropologists Margaret Lock and Judith Farquhar were up to the task, and skillfully led readers through the discursive thread and in the understanding of their proposition, which can be summarized as “... comparative scholarship in anthropology, history and the humanities shows that the problem of the body can be read from many kinds of discourses, mundane practices, technologies and relational networks.” The book draws from history, philosophy, anthropology and literature to paint a picture of the evolution of knowledge, perceptions and theories of the body and its role in culture.

One of the most interesting aspects of the book is its discussion of “local biologies.” The term, used by the editors in the introduction, is the unifying theme of the collection: It refers to how every culture has a different view of the body, a context that is internalized and feels “natural” for the members of that culture. In a real postmodern way, the idea of a body “proper,” unified, constant through geography and history, is deconstructed to analyze its cultural context and multiple meanings.

Clinicians will be particularly interested in the last 2 sections, discussing “Bodies at the Margin, Or Attending to Distress and Difference” and “Knowing Systems, Or Tracking the Bodies of the Biosciences.” These texts examine how we are rethinking the body in contemporary context, including new reproductive technologies, molecular biology, “unusual anatomies” and even *Body Worlds*, the exhibition of plastinated cadavers that is touring internationally.

Unfortunately, the editors chose not to write a conclusion to their book, and this might be the main weakness of this collection. People interested in humanities or medical anthropology will already have had read some of the articles — classics from Walter Benjamin, E.E. Evans-Pritchard and Marcel Mauss. However, it is Lock and Farquhar’s commentary that brings the book alive and

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