

A beautiful mind

June 9, 2012

Be the first to write a review

Read later

Review by **Tanveer Ahmed**

The author is living proof that it is possible to correct mental dysfunction.

[Email article](#) [Print](#)


Lifting the fog ... Arrowsmith-Young overcame her learning disorder.

Reader rating: (1 vote)

Genre : [Science/Nature](#)
 Author : [Barbara Arrowsmith-Young](#)
 Publisher : [HarperCollins](#)
 Year : 2012
 Pages : 288
 RRP : 29.99

The science aisle generally lies well away from the self-help section, with hard reality on one set of shelves and wishful thinking on the other. The excitement surrounding the notion of neuroplasticity - the discovery that the human brain is as malleable as a lump of wet clay not only in infancy, but also well into hoary old age - straddles the gap.

Following on from the immense popularity of Canadian psychiatrist Norman Doidge's book, *The Brain That Changes Itself*, comes the literary equivalent of a spinoff series with one of the characters of that book, Canadian educator Barbara Arrowsmith-Young, penning *The Woman Who Changed Her Brain*.

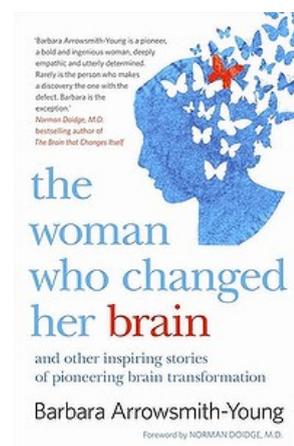
In the foreword to the book, Doidge calls Arrowsmith-Young's personal journey "truly heroic" and the writer "a bold and ingenious woman ... Rarely is the person who makes the discovery the one with the defect. Barbara is an exception".

Arrowsmith chronicles how she overcame her inability to conceptualise causality despite having excellent audio and visual memory. She could "make no sense of the relationship between the big and little hands of an analogue clock". Even simple arithmetic was beyond her capability and her reading comprehension was poor. She had difficulty following conversations, catching only fragments at a time and then replaying them in her head later. Her frustration climaxed at age 14 when she cut her wrists with a razor blade, but she castigated herself soon afterwards for failing even at self harm.

She writes that by dint of her "singular work ethic and gritty determination to succeed", she stumbled through school by relying on her phenomenal memory to compensate for her disabilities.

At 25 while at graduate school, Arrowsmith-Young encountered the work of Aleksandr Luria, the great Russian neuropsychologist who helped brain-damaged soldiers overcome their dysfunction. She also read the work of an American researcher who proved that rats' brains physically changed in response to stimulation.

Based on this research, Arrowsmith-Young created flash cards to simulate the movement of



The Woman Who Changed Her Brain by Barbara

a clock's hands. She spent hours on this and other exercises, persisting until she rewired the parts of her brain that had not been working. Her fog lifted for good. She had stumbled across the foundations of the science of neuroplasticity.

Arrowsmith-Young recounts the stories of about 30 children and adults who have corrected learning disabilities by performing her cognitive exercises, either at her school or other private schools in Canada and the US that use her program.

It's an exciting and hopeful book for anyone who has struggled with learning disorders. The exercises appear unusual, varying from students clicking away at computer screens with 10-handed clocks or sitting like pirates with a patch over one eye tracing Hindu script, forcing the weaker side of the brain to work. It highlights the brain conceptualised as our most powerful muscle, with her exercises a kind of mental physiotherapy.

Doidge considers learning disorders to be one of the most underestimated causes of failure at school and in life. "It wrenches my heart to think of all the children, sitting in schools throughout the world, wiring into their brains each day the idea that they are dumb."

Neuroplasticity has significant political implications, for the presence of scars from early childhood deprivation suggests that those who trumpet the individual's capacity to triumph over environment confront significant limitations. This forms the basis for the huge resourcing of early childhood learning and intervention.

Yet neuroplasticity also tempers extreme beliefs of environmental determinism and suggests we can remake ourselves. The book strays from wider implications of Arrowsmith-Young's work, but it highlights the tragedy that more children can't access the techniques and is an inspiring life story.

THE WOMAN WHO CHANGED HER BRAIN

Barbara Arrowsmith-Young
HarperCollins, 288pp, \$29.99

Tanveer Ahmed is a Sydney psychiatrist and writer.

[Current jobs](#)

- [Marketing Manager - Sh...](#)
\$70,000
Sydney Metro, NSW
Judd Farris
[View Job](#)
- [National Account Manager](#)
\$65,000 - \$70,000 p.a.

Reviews

Be the first to write a review.

Login to Review

New user? [Sign up](#)

[Email article](#) [Print](#) [Reprints & permissions](#)