



***The Brain That Changes Itself: Stories of Personal Triumph from the Frontiers of Brain Science* (Revised Edition)**

By Norman Doidge, MD

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Reviewed by Dr. Neil Hucker

When I first heard the title of this book last year I immediately thought of J.L. Moreno's (1978) Canon of Creativity, that circular/spiral relationship between the conserve and spontaneous new role development. With my underlying biological orientation as a psychiatrist I am always on the lookout for developing perspectives on the foundational biological processes of spontaneity, creativity and role development. How does the brain work? And how does it accommodate on going progressive change that facilitates continuous development of roles and the self?

For a long time the brain has been viewed as developing a fixed and conserved structure. Its various functions are seen as localised in particular areas to provide and use discreet, un-transferable processes. This view of the neurological brain does not accord with my psychodramatic experience. Although my understanding of conserved role functioning fits, the spontaneity process and the creation, training and integration of new roles does not.

The Brain That Changes Itself, written by psychiatrist and researcher Dr. Norman Doidge, focuses on the developing science of brain neuroplasticity. This term designates the brain's ability to re-wire its neural circuits and creatively adapt its functioning, a process I associate with Moreno's role development. No wonder I had such a powerful positive response to the book. The many aspects of brain neuroplasticity that the author details are in accord with the spontaneity process in psychodrama.

The book is presented in eleven chapters with two appendices on cultural modification and the neuroplastic implications for progress. Dr. Doidge provides extensive references and research studies, and the accompanying notes are very readable and informative in their own right. The chapters progress from descriptions of the purely physical disorders of brain damage and developmental dysfunction to research that is being undertaken on neuroplastic transformational change. These changes can be demonstrated in basic functions such as perception, memory, learning, thought and particularly behavioural action. The author describes the way in which, through intensive action retraining and repetition of underdeveloped neural circuits, old and new functions can spontaneously adaptively develop and take over very adequately.

Dr. Doidge then moves onto more psychological and social functions that I correlate with Moreno's concept of role. The importance of the imagination in role development, even at a physical action level, is given a wonderful biological perspective. I was excited to discover that neuroplasticity can explain the means by which social atom repair, produced in the surplus reality of a psychodrama, is spontaneously integrated by the brain. Finally the author discusses the significance of the discovery of stem cells in the brain. The presence of these omni-potential foundational cells of the body in the brain indicates that not only can conserved brain circuits and their resultant overt roles change, but that new action circuits can be created and trained.

The Brain That Changes Itself is a very useful, significant and enjoyable book. Particularly it provided me with more understanding to glimpse the possible biological roots of spontaneity — neuroplasticity. I rarely read books for a second time. This one I did. For those of you with a developed biological understanding and those coming to grips with the new psychotherapeutic neurobiological expectations, this book is an informative, absorbing, helpful and important read. Even Moreno's idea of the conserved psychosomatic roles is up for re-evaluation.

And oh, what a wonderful cover!

REFERENCE

Moreno, J.L. (1978). *Who Shall Survive? Foundations of Sociometry, Group Psychotherapy and Sociodrama*. Beacon House, New York, USA. (Original Publication 1934)

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