

Book review

Origins of Neuroscience

S. Finger, Oxford University Press, Oxford, 1994.

If he had seen further than other men, said Isaac Newton in one of his rare modest moments, it was by standing on the shoulders of giants. Neuroscientists cannot pursue their trade for very long before becoming aware that we are involved in one of the great enterprises in the history of ideas, one with long roots and a marvellous cast of characters. As a group we tend to be more aware of the history of our subject than any other group in the life sciences.

However, up until now we have labored under a handicap. Although there has been no lack of outstanding publications in the field, we have had no single book that attempted a really comprehensive overview of the development of all the major concepts in neurobiology. Clarke and Dewhurst's fine 'An Illustrated History of Brain Function' (1972) was the best introductory treatment we had, but it did not really fill that niche. Clarke and Jacyna's scholarly 'Nineteenth-century Origins of Neuroscientific Concepts' (1987) restricted itself in time and required of the reader a deep immersion in the theme.

Now, the Vesalian skeleton on its cover welcomes us to this masterly, readable and long-needed book. Its organizing theme is cerebral localization, with individual treatments of the senses, the motor system, emotion, memory and intellect, and neurological illnesses and their treatment. Each topic is then treated with as long a historical perspective as needed, up to the early 20th century. Historical figures appear and disappear according to how they figure in the evolution of the specific

topic. This technique makes the material readily accessible. Read from cover to cover, it provides a panorama of the entire field. Read by the casual reader who wants some background on a restricted topic, the book offers a series of bite-sized essays that can be munched at leisure.

How did Golgi and Ramon y Cajal differ on the neuron theory, despite sharing a Nobel prize on it? What was the logic behind critics of cortical localization? How was pain, or memory, or emotion, thought of through the ages? Did Samuel Johnson have Tourette's syndrome? There is much here for both basic scientists and clinicians.

Producing this book required the assimilation of a prodigious amount of secondary literature. Only someone who loves to read history could have done it, but the author is aware that only the original source can give the real flavor of the past, and almost every page carries a brief quotation from the primary source. The extensive bibliography is an accurate guide to the literature.

As with any wide-ranging treatment, readers who have studied particular topics in depth will have differences with the author. (For myself, I would just as well have had Herman Munk's 'soul-blindness' given short shrift.) But the author disarms critics by explicitly welcoming suggestions as to where the book can be improved in the next edition. I hope there is one. Any book that quotes from 'Dr. Jekyll and Mr. Hyde' in a discussion of cerebral dominance or from 'Frankenstein' in an essay on electrotherapy deserves one.

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