

Book Review

Stanley Finger, François Boller, Kenneth L. Tyler (eds.)

History of Neurology

Handbook of Clinical Neurology, vol. 95
Amsterdam, Elsevier, 2010
970 pp., EUR 251.00
ISBN 978-0-444-52009-8

There is no dearth of books on the history of medicine. Those on the history of neurology are rarer: Walther Riese published one in 1959, followed by the famous *Garrison's History of Neurology*, originally written between 1913 and 1925 and updated in 1969 by Lawrence McHenry, and *The Human Brain and Spinal Cord. A Historical Study Illustrated by Writings from Antiquity to the Twentieth Century* by E. Clarke and C.D. O'Malley in 1968. Since then, no one has tried to embrace so vast a panorama. Some authors devote themselves to short biographies (*The Founders of Neurology*, W. Haymaker and F. Schiller, 1970), others to limited periods (*A Short History of Neurology: the British contribution*, F.C. Rose, 1999) or to compilations of articles that have appeared in various journals of neurology over time (*Fragments of Neurological History*, J.M.S. Pearce, 2003). In 1994, Stanley Finger published *Origins of Neuroscience, a History of Explorations into Brain Function*. In association with François Boller and Kenneth L. Tyler, he now presents us with a difficult-to-hold-in-your-bathtub (3 kg!) encyclopedic work: nearly 1,000 pages, 59 collaborators. *History of Neurology* is the 95th tome in the never-ending 'Handbook of Clinical Neurology' series, which was initiated several decades ago.

In a desperate-looking attempt to encompass the evolution of neurology over the centuries, the editors start by presenting a chronological panorama embracing the history of neurology and its premises over more than two millenaries, followed by the history of the development of different branches of the discipline such as imaging, neuropediatrics, neuroendocrinology or molecular biology. Then comes a vast ensemble that traces the acquisition of knowledge disorder by disorder (headaches, epilepsies, sleep medicine etc.) and of some specific therapeutics. Finally, the last section deals with the history of neurology as developed in different parts of the world. A general, introductory, conceptual chapter on neurology and its evolution, including its boundaries and overlaps with other fields such as psychiatry, is sorrowly missing, as is one on the historical perspective of neurological diagnosis and treatment, although such chapters would appear to have been 'musts' in the present enterprise.

Can one speak of neurology in antiquity? The authors suggest that the practice of trepanation as far back as the Neanderthals may indicate an attempt to save victims of skull fractures. More originally, the chapter devoted to Mesopotamia presents a decryption of cuneiform texts that have until now been the exclusive preserve of specialist historians. F.M. Fales boldly states that he recognized, in a recently decoded tablet, the first description of the syndrome of Gilles de la Tourette!

H. Isler describes, in a very original fashion, how Thomas Willis (1621–1676) laid the foundations of neurology, not only by the discoveries regarding the anatomy of the nervous system that made him famous, but also by analyses of subjects ranging from human thinking, consciousness and vegetative life up to concepts of sleep, epilepsy and abnormal movements.

The metaphor of the brain communicating by telephone (nervous input, electricity coursing through the nerves) or by mail (hormonal messengers) is sumptuously illustrated in one of the most captivating chapters of this work 'History of Neuroendocrinology' by F. Kreier and D.F. Swaab. A result of the work of Claude Bernard and the concept of the autonomic nervous system, the field of neuroendocrinology has undergone considerable development since the time of H. Cushing. Indeed, no current knowledge can be explained without the concepts of the portal system, releasing factors, neuropeptides and neuromodulators.

The various chapters on the history of knowledge by disorder are more classic in style and substance. To span the history of abnormal movements is a difficult task, keeping in mind their intricacies and confusion with mental disorders over centuries. And the reader cannot but regret that D.J. Lanska has taken a limited Anglo-Saxon view, omitting, for example, the original contributions of the followers of J.M. Charcot, such as Paul Blocq or Achille Souques. Painful omissions can alas be found in several other chapters, e.g. the lack of mentioning Dechambre or Durand-Fardel, who reported lacunes one century before Fisher, or the absence of any discussion on the reports of transient ischemic attacks in the nineteenth century, in the chapter on cerebrovascular disease.

The 13 chapters dedicated to the development of neurology by country are rather unequal in quality. The most original one is that of N.S. Chu: 'Neurology and Traditional Chinese Medicine'. The roots of Chinese medicine lie in a thousand-year-old philosophy that is apparently diametrically opposite to that of Western medicine. However, paradoxically, it appears that the notion of Hippocratic humors is comparable to the doctrine of elements (microcosm and macrocosm, yin and yang) that underlies Chinese medicine. The nervous system was ignored for centuries in

that country also. The striking illustrations show an imaginary anatomy close to botanical. While the Jesuits tried to introduce notions of anatomy and blood circulation in the 18th century, physicians of the Chinese imperial court were able to oppose them until the middle of the 19th century. Contrarily, leprosy was known to be contagious as early as the 12th century in China, unlike in the West, where it was thought to be hereditary; beri-beri, chronic in southern China, was treated by replacement therapy; fractures were set under general anesthesia using narcotics; ephedrine, an alkaloid from the Ma Huang plant, was used to treat fevers, coughs and post-partum pain. On the other hand, other chapters are surprisingly disappointing or imbalanced: Australia-New Zealand receive 20 pages against 8 for the USA, the international connections of Russian neurologists (Rossolimo, Korsakov) are omitted, Switzerland has been transformed into a German province and deserves only a few lines in contrast to full subchapters for each Latin American country, etc... The chapter on French neurology is interesting, since it mentions people and places often overlooked in other treatises; however, at the expense of several unacceptable omissions of major historical figures, including Charles Lasègue, Édouard Brissaud or Gustave Roussy. The famous Brouillet painting of J.-M. Charcot's lesson is reproduced as if the session took place in a cave and without any explanation on the represented people. The author also seemed unfamiliar with first names, with Guillaume Duchenne de Boulogne or Étienne Esquirol being re-baptized with one of their ancillary first names. Other chapters unfortunately also contain wrong spelling of persons' names (e.g. Greisinger instead of Griesinger).

An excellent and original chapter is the one by Geneviève Aubert on the use of photography and cinematography in neurology.

But there is no chapter on the evolution of neurology journals, books and conferences, which would have been an innovative plus. However, the most unforgivable mistake is to have 'forgotten' hysteria in a specific chapter, especially since it is also virtually and incomprehensibly absent from the chapter on Charcot. With general paresis of the insane, hysteria probably was the most quoted 'neurological disease' in the 19th century, and Charcot indeed largely built what was to become modern neurology on one side and psychiatry (replacing alienism) on the other side, on the ground of his studies on hysteria from the early 1870s. Hysteria also offers a perfect opportunity for discussing the evolving relationships between neurology and psychiatry, a still very hot topic today, which the editors apparently did not mind to omit.

Such a work, involving so many authors, cannot avoid certain generic defects due to the heterogeneity of presentations. For example, 41 pages on vitamins contrast with less than 10 pages for aphasia, which is frustrating given the masterly way Eling and Whitaker prepared their chapter on 'History of Aphasia: From Brain to Language'. Probably because of lack of appropriate instructions, the chapters' bibliographies are often either too concise or excessive. The same theme, for example infantile myopathies, can be found in the chapter on pediatric neurology or in the one on muscular dystrophy. It is also a pity that certain images, copied from the internet, are pixelated, such as the portrait of C. Foix on page 409, unworthy of a publication of this quality.

Despite these too numerous flaws, and mainly given the scarcity of books on neurological history, an indispensable work for anyone interested in the evolution of neurology.

O. Walusinski, Brou
J. Bogousslavsky, Montreux