Book review

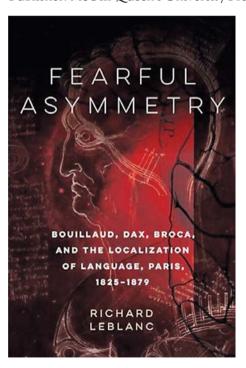
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## Fearful Asymmetry Bouillaud, Dax, Broca, and the Localization of Language, Paris 1825-1879

## By Richard Leblanc

Publisher: McGill-Queen's University Press, Year: 2017, Hardback, 255 pages



That we take for granted the cerebral localization of articulate language proves how important a discovery it was. This rather simultaneously does injustice to the long and huge effort required of many people in achieving that leap of faith and in proving it; it did not happen overnight. And indeed such a leap it was back in 19th century Paris, as the prevailing dogma of symmetrical function in paired organs "ought to apply to the brain too" with its seemingly symmetrical hemispheres.

Proposing lateralization of cerebral function risked being ridiculed and required courage to stir strongly held beliefs, and to be subject to critical analysis (and analytical criticism) by the influential figures in the medical politics of the day.

No wonder it took decades for Paul Broca, the well-known physician and anthropologist to whom *Broca's aphasia* refers, to articulate his proposed theory with conviction.

The author, Richard Leblanc, is a neurosurgeon with a special interest in brain mapping, being the first to demonstrate that functional imaging is reliable in the assessment of patients with structural brain lesions in the motor strip and in language areas. He works at Montreal Neurological Institute and therefore follows Wilder Penfield's legacy of mapping the functions of the brain including the homunculus. An interest in Paul Broca is thus well understood.

The setting is the 19<sup>th</sup> century Parisian hospital district.

The quest is the understanding of the brain organisation of language.

The *players* are brain symmetry's defenders vs the proposers of lateralisation.

The audience and jury are the metropolitan medical society meetings where physicians of the day regularly met, presented and discussed their work. Provincial society meetings, such as in Montpellier, though less prestigious did come to play an important role in this story. Throw in the mix the background of the debates in phrenology; and the changes from the Royal to the Imperial and eventually to the National Academies of Medicine and of Science, and these medico-political ramifications provide a different dimension to the narrative.

There are at last explanations why different terms were used at different times. Do you know the difference between aphemia, aphasia, alalia, anarthria, agraphia? Do you know if Broca truly was the first to suggest the brain 'centre' for language? What is Broca's connection to metabolic brain scanning with Positron Emission Tomography (PET scanning) a century later?

Such information is vividly represented throughout *Fearful Asymmetry* by Leblanc, who pays tribute to all notable names, including Broca himself, and who importantly depicts the framework wherein some of the beginnings of modern localising ideology flourished.

Leblanc's contribution is important. Though perhaps esoteric a topic to the uninitiated, this is a well-written and easy to follow book, appropriately referenced and footnoted. What is commendable is the fact that the author researched the vast primary sources in French and brings to us information that was previously unexamined with a knowledgeable critical eye. Done in a vivid and clear style, the result is a read highly recommended.

An amended version of this has appeared on the website of the British Society of the History of Medicine.

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