

Aphasia Insights!

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“In considering Jackson’s ideas on brain function, it is important to remember that he was working in an era in which neuron theory was as yet not established, the synapse was unknown and the concept of electrical activity in the nervous system was no more than a rudimentary inference” (Swash, 2015, pp. 5).

Swash, Michael. John Hughlings Jackson (1835–1911): An adornment to the London Hospital (2015). *Journal of Medical Biography*, Volume 23, Issue 1, 2-8.

Aphasia Nation, Inc. is committed to educating the wider public about stroke and aphasia and the “*Aim High for Aphasia!*” international Aphasia Awareness campaign.

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John Hughlings

Jackson:

The Father of English Neurology.

By Tom Broussard, Ph.D.

This is the next in a series of articles about the science and scientists behind the brain, stroke, aphasia, plasticity and recovery.

John Hughlings Jackson, FRS (4

April 1835 – 7

October 1911)

was a physician and an English neurologist. In

1862 he was

appointed

Assistant

Physician, later

(1869) full

Physician at the

National Hospital

for Paralysis and Epilepsy located in

Queen Square, London (now the

National Hospital for Neurology and

Neurosurgery) as well as Physician

(1874) at the London Hospital. He was

elected a Fellow of the Royal Society

in 1878 ([Wikipedia](#)).

He is well known for his research on epilepsy (seizures) ([York, 2007](#)) and aphasia, noting that some aphasic children were able to sing, even though they had lost the power of ordinary speech. He was also one of only a few physicians to have delivered the [Goulstonian](#) (1869), [Croonian](#) (1884) and [Lumleian](#) (1890)

lectures to the [Royal College of Physicians](#) ([Wikipedia](#)).

After medical school, and “walked the wards” at [St Bartholomew's Hospital](#)

(a teaching hospital which was founded in 1123), he was appointed

staff at London Hospital (and now the [Royal London Hospital](#)) in 1864 when

he was just twenty-nine years old.

Shortly after that, he presented his first lecture at the London Hospital

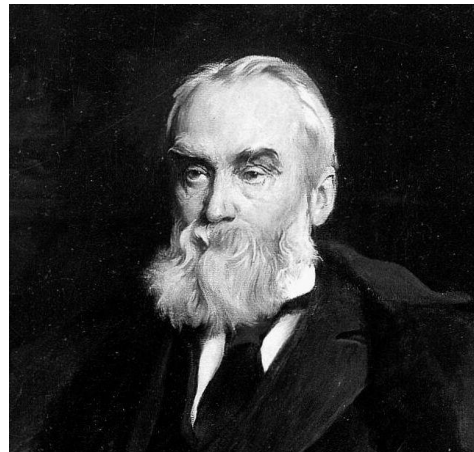
regarding “the classification of defects of speech” ([Head, 2014/1926, pp 34](#)).

That was the beginning of almost thirty years (1864 to 1893) of intensive study and

detailed scientific writings. He described epilepsy as “[the name for occasional, sudden, excessive, rapid, and local discharge of grey matter.](#)”

His research on aphasia was a breakthrough as Jackson remarked that “words in sentences lose their individual meaning, if single words can be strictly said to have any meaning, and the whole sentence becomes a unit, not a word heap” ([Brain, 1915, pp. 56 in Head, 2014/1926, pp. 40](#)).

The scientists during that era, assumed that people “think in words” but no one “had considered that words might



John Hughlings Jackson (1835 -1911)

disappear in the unity of a sentence, still less that behind the sentence might be a general verbal proposition” ([Head, 2014/1926, pp. 40](#)).

Jackson proposed that single words “are meaningless, and so is any unrelated succession of words. The unit of speech is a proposition” ([Brain, 1915, pp. 113-114 in Head 2014/1926, pp. 40](#)) and thus the loss of speech “is, therefore, the loss of power to propositionise...hence we do not use the expression that the speechless man lost words, but that he has lost those words which serve in speech. In brief, speechlessness does not mean entire wordlessness” ([Brain, 1915, pp.114 in Head, 2014/1926, pp. 41](#)).

Jackson’s work wasn’t widely published abroad in scientific literature and his “uncouth nomenclature” was too difficult to read ([Head, 2014/1926, pp. 31](#)). Few contemporaries even tried to understand Jackson’s doctrines until [Arnold Pick \(Czech psychiatrist\)](#) dedicated one of his books in 1913 to “Hughlings Jackson, the deepest thinker in neuropathology of the past century” ([Head, 2014/1926, pp 30](#)).

As Jackson was fond of saying, “it generally takes a truth twenty-five years to become known in medicine” ([Head, 2014/1926, pp. 31](#)). But as difficult as it was to convince his scientific peers of the full understanding of his research, descriptions and methods, his messages survived and flourished in the modern world.

Another of Jackson’s tenets, now part of modern neurology, stated that “destructive lesions never cause positive effects, but induce a negative condition which permits positive symptoms to appear” ([Brain, 1915, pp.](#)

[154-155 in Head, 2014/1926, pp. 31](#)). He referred to the fact that lesions are always destructive, but the “positive mental symptoms arise during activity of lower centres or lower nervous arrangements which have escaped injury” ([Brain, 1915, pp. 154-155 in Head, 2014/1926, pp. 33](#)).

He insisted that his students, doctors, and researchers simply record “what the patient *does* get at and avoid all such terms as amnesia, etc.” ([Head, 2014/1926, pp. 33](#)). He observed his patients carefully, kept track of every movement, utterance or gaze shift, and waited until after all the evidence had been recorded, assessed and considered before reaching a reasoned opinion.

In Jackson’s case, he wanted to include still more support, and after many years of continued study and research on epilepsy, he updated his 1873 article, [On the Localisation of Movement in the Brain](#), in 1875 with a preface (48 pages) that took longer than the article (37 pages) itself ([Jackson, 2019/1875](#)).

Jackson’s ultimate skill was his power of clinical observation, not unlike Charles Darwin who observed, “I have no great quickness of apprehension or wit...my power to follow a long and purely abstract train of thought is very limited...[but] [I am superior to the common run of men in noticing things which easily escape attention, and in observing them carefully](#)” ([Darwin, 1998/1872](#)).

Darwin lived to see his world change around him based on his work but it took another century for Jackson’s contribution to neurology and aphasiology to take hold in the

speechless but not wordless world of aphasia.

Signed: *The Johnny Appleseed of Aphasia Awareness*

The author is a three-time stroke survivor and aphasia. He could not read, write or speak well and it took him years to recover.

He is Founder and President, Aphasia Nation, Inc., a non-profit organization whose mission is educating the wider public, national and international, about aphasia and plasticity, the foundation of all learning.

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