

**Tuning the Language Organ:
A New Perspective on the Role of Broca's Area in Language Processing**
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Abstract:

For more than a century, lesions to the left frontal operculum have been implicated in a constellation of linguistic deficits affecting the production of words and sentences and the comprehension of certain syntactic structures. However, the preponderance of the evidence fails to support the link between this structure, Broca's area, and this syndrome, Broca's aphasia. Rather, numerous neuroimaging and neuropsychological studies have converged on the hypothesis that Broca's area is involved in selecting information among competing alternatives. Here, I explore the possible link between this putative selection mechanism and some deficits that are commonly observed in nonfluent aphasia. The ability to explain certain linguistic deficits as a failure of a more general selection mechanism may have far-reaching implications for the study of language. For reprints and more information, see <http://www.psych.upenn.edu/stslab/stsindex.html>

As background, I would recommend that everyone read one or both of the following:

Thompson-Schill, S. L. (2005). Dissecting the language organ: A new look at the role of Broca's area in language processing. In A. Cutler (Ed.), *Twenty-first Century Psycholinguistics: Four Cornerstones*. Hillsdale, NJ: Lawrence Erlbaum Associates, p. 173-189.

Thompson-Schill, S. L., Bedny, M., & Goldberg, R. F. (2005). The frontal lobes and the regulation of mental activity. *Current Opinions in Neurobiology*, 15, 219-224.