What Constitutes the Neurobiology of Language and Why is it Relevant for Linguistics?

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This talk will focus on the nature of the neurobiology of language and its relation to other fields of inquiry, particularly linguistics and psychology. The talk will start with a definition of the neurobiology of language and a discussion both of what it is and what it is not. Following this introduction to the topic, the talk will proceed to a brief history of the field, and then the remarkable revolution that has been made possible by non-invasive in vivo measures of brain function in healthy individuals. We will argue that a theory of the neurobiology of language must be informed by linguistics and psychology, but constructed on a biological framework that makes evolution its primary foundation. In this context, we present data from primate audition, motor, and visual circuitry that can be used as a basis for human research. Next we show data from human imaging experiments that illustrate some of the biological bases of sentence comprehension, and finally, we present a novel biological and evolutionary model of human sentence comprehension.