

Thursday April 21st, 12pm (noon) ET

Presentation in Zoom, accessible via the C-STAR website:

<http://cstar.sc.edu/lecture-series/>

The Neurobiology of the Lexical System: What kind of data is actually missing?

Sladjana Lukic, PhD

Department of Communication Sciences & Disorders
Ruth S. Ammon College of Education and Health Sciences
Adelphi University, New York

Compared to other animals, humans have developed a uniquely broad and highly efficient lexical system. Studying the lexical system can be conceived as the study of words, their structure, and their use. The distinct patterns of word use might be indicative of its category (like noun or verb) and/or subcategories (like transitive or intransitive verbs). An interesting test case are words that, though highly productive in the English language, are relatively understudied: a word that, free of any other context, could take different meanings and belong to different categories (e.g., *the brush* and *to brush*). *Do word categories really exist? Can we find evidence that these word categories are functionally dissociated and/or byproduct of online distributed computations? How are such categories (or distributed computations) instantiated neurally?* At the moment, available empirical evidence seems to be inadequate to fully address these questions. In an attempt to overcome each single method limitations, I integrate a wide array of disciplines including formal linguistics (*which models can account for the word categories effects observed*), natural language processing (*what words co-occurrence in text reveals*), and neuropsychology (*how word categories are affected by brain damage*). In this talk, I will focus on studies investigating the lexical system in healthy people and patients with focal and progressive brain disorders. I will provide compelling evidence for the existence of functionally and neurally dissociable lexical-semantic (i.e., semantic/thematic relations) and lexical-syntactic systems (i.e., morphosyntax, category conversion). This body of evidence will be instrumental in redefining our understanding of the neurobiology of the lexical system..

The online lecture can be followed online from your computer, tablet or smartphone, in **Zoom**. The zoom link is accessible via the C-STAR website: <http://cstar.sc.edu/lecture-series/>

For more information, or to be added to the C-STAR mailing list, contact Dirk den Ouden: denouden@sc.edu