

Thursday September 9th, 12pm (noon) ET
Presentation in Zoom, accessible via the C-STAR website:
<http://cstar.sc.edu/lecture-series/>

Neural Synchrony During Naturalistic Perception is Associated with Comprehension Scores in Listeners with Aphasia

Lisa Johnson, PhD.
University of South Carolina

Neural synchrony across listeners during language processing has been found to be associated with successful comprehension in neurotypical adults. At initial presentation of auditory-visual stimuli, neural responses appear to oscillate in different rhythms across brain regions. As the stimulus progresses, the time course of neural activity synchronizes across listeners, particularly in primary auditory and visual processing regions. In persons with aphasia, language comprehension is often impaired, resulting in differing degrees of comprehension deficits depending on the size and location of one's lesion.

This study investigated neural synchrony among participants with aphasia compared to neurotypical controls attending to the same naturalistic stimulus in order to determine if synchrony is associated with comprehension ability. Results indicate that individuals with aphasia do not synchronize in intact brain regions and that regionally-specific synchrony is associated with comprehension scores.

The present study provides evidence that naturalistic synchrony can explain some degree of the integrity of residual regions and regional synchrony is associated with off-line comprehension ability.

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