## Thursday January 27<sup>th</sup>, 12pm (noon) ET Presentation in Zoom, accessible via the C-STAR website: http://cstar.sc.edu/lecture-series/

## Adaptation to others' speech: Evidence from patients with neurological conditions

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One of the remarkable characteristics of spoken language is that it is constantly undergoing change. The speakers of a community continually influence each other in the phonetic nuances of their speech, leading to the emergence and drift of accents in a language and continuous sound change. The plasticity of sound patterns is driven by processes of covert mutual adaptation among those who interact in conversations. It thereby reflects a constant interplay of perceptual and motor processes of spoken language within and across social or regional groups and a malleability of the sensorimotor goals of speech across lifetime. Existing models of speech motor control largely neglect this plasticity by focusing on internal sensorimotor adaptation processes that aim to protect the suspected invariance of phonological goals against variability and change in the motor system. Sensorimotor and neuroanatomic mechanisms of adaptation to others' speech are still underrepresented in research.

I will present studies that investigate the propensity of patients with dysfunctions in different regions of the brain to align with or adapt to others' speech. Patients with left and right hemisphere stroke, Parkinson's disease and cerebellar ataxia were examined to investigate the contributions of cortical and subcortical structures in the covert imitation of fine phonetic detail and in temporal alignment with model speakers. Theoretical and clinical implications will be discussed.

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

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