

Language and Cognition *University Seminar #681*

Meeting of March 5, 2020

“The evolution and integrative biology of vocal learning”

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Vocal learning refers to the dependence of the developmental trajectory of vocal production on an individual's social experience. This definition is compatible with the dynamical systems view of speech development and with general theories of learning. Yet, for over 30 years now, the concept of vocal learning has gradually been equated to vocal imitation. Along with this rather narrow view, the substrates for vocal learning are considered by many investigators to simply be a pathway between the forebrain to the brainstem nucleus innervating the laryngeal (or syringeal in birds) muscles. I will use recent discoveries in marmoset monkeys and other species to argue that restricting vocal learning to imitation and a narrow neural substrate does not do justice to this complex behavior. Studying vocal learning from the perspective of general motor development provides better illumination of the various means by which vocal learning can be achieved. Indeed, the apparent paradox in human versus non-human mammalian vocal learning is better resolved when analyzed from the motor development perspective.

Place: The Faculty House
64 Morningside Drive
Columbia University

Time: 4:00 PM

For directions to the Faculty House, please refer to the map at this URL:

<http://www.columbia.edu/files/columbia/content/morningsidecampus-2011-02-16.pdf>

RSVP: If you will attend the meeting on March 5, please send a note to:

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If you will join Professor Ghazanfar for dinner at the Faculty House after the meeting, please indicate this in your rsvp.