

# Dynamics of lexical access and speech articulation

Matt Goldrick  
Northwestern University

During speech, the positions of the articulators evolve continuously in physical space. Theories of lexical access have proposed a dynamical process also underlies speech planning. As words and sound structures are retrieved from memory, the state of the mental representations underlying articulation evolve continuously in an abstract *symbolic* space, organized around the dimensions that define linguistic structure. To support this view, I will review evidence suggesting multiple planning elements can be co-activated and as a result co-produced in articulation. Critically, the degree of co-activation is dynamically modulated by variables affecting lexical access. I'll then discuss recent evidence from my lab extending this work to higher levels of planning; these results suggest that the dynamics of semantically-driven co-activation can modulate articulation.