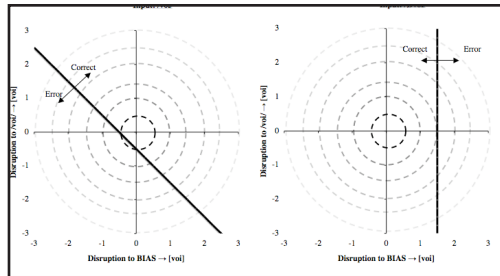


NORTHWESTERN INSTITUTE ON COMPLEX SYSTEMS PRESENTS

Wednesdays

@NICO

Brain Injury as a Window Into the Structure of the Mind: Insights From Behavioral Studies & Neural Network Models



Matthew Goldrick

Linguistics & Northwestern Institute on Complex Systems

Wednesday December 3, 2008

12:00 – 1:00 PM

Chambers Hall, 600 Foster Street, Lower Level Classroom

Damage to the central nervous system (via accident or disease) frequently leads to profound deficits in human behavior. These deficits exhibit a high degree of structure, providing a critical window into the functional organization of human cognition. This talk examines the bidirectional link between behavioral deficits and cognitive structure. I'll first review insights into the structure of human language processing that have come from behavioral studies of individuals who have difficulty producing speech. I'll then review recent work in my research group that uses artificial neural networks to formalize the link between the structure of human language processing and patterns of performance arising subsequent to neurological impairment.

This work is in collaboration with Brenda Rapp (Johns Hopkins, Cognitive Science) and Robert Daland (Northwestern, Linguistics and NICO-LMC).

NICO Coffee Hour will follow for questions, networking, and collaboration.

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