

NORTHWESTERN INSTITUTE ON COMPLEX SYSTEMS PRESENTS

# Wednesdays

# @NICO



## *Tracing Semantic Change with Latent Semantic Analysis\**

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**Cognitive Psychology, Weinberg College of Art & Sciences**

**Wednesday, February 4th, 2009**

**12:00 – 1:00 PM**

**Chambers Hall, 600 Foster Street, Lower Level Classroom**

Text corpora are the main source of data in the study of semantic change. Unlike other areas of corpus linguistics, historical semantics depends on careful selection and interpretation of individual occurrences of linguistic forms, a laborious process which resists automatization and thus cannot be easily scaled up to large data sets. In this talk I will present a new statistical method, based on Latent Semantic Analysis which overcomes this limitation. By comparing the density of semantic vector clusters this method allows researchers to make statistical inferences on questions such as whether the meaning of a word changed across time or if a phonetic cluster is associated with a specific meaning. I will then demonstrate its utility in a series of case studies on semantic changes in Early through Middle English (rise of periphrastic 'do', broadening of 'dog', and narrowing of 'deer').

\*NICO-LMC and Linguistics faculty members Stefan Kaufmann and Brady Clark are co-collaborators on this research.

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

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