

Course number and title: LING 451-0 : Proseminar in Sound Structure

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Course description: This is a research seminar on language sound structure. The topic for Winter 2006 will be "Inter- and Intra-Talker Variability: Contact Induced Variability" We will review some of the main empirical findings on the causes and effects of signal variability both within and across native and non-native talkers. We will discuss the implications of these findings for theories and models of cross-language and second-language speech production and perception, and for speech technology (speech synthesis and automatic speech recognition).

Projects: A major component of the course will involve the design, compilation and exploration of speech databases. Students will work either individually or in small groups to produce a speech database "prototype" that can be used to develop descriptive and inferential analyses of speech variation across and/or within talkers.

Prerequisites: First year graduate work in phonology/phonetics, speech science, or psycholinguistics, or permission of the instructor.

Teaching method: Discussion and lecture.

Evaluation method: Class presentations, collection and analysis of primary data.

Reading: From the current research literature.

Restrictions: None. Please note that students who took this course last year, may participate again this year (see the instructor for more information).

Winter 2006
Ling 451: Proseminar in Sound Structure
Inter- and Intra-Talker Variability: Contact-induced Variability

Sample databases:

Everyone explores just one of these.

Come to class in weeks 2 and 3 with a brief description of the database(s). Focus on the database motivation and design.

- Variation in Conversation: The Buckeye Speech Corpus:
<http://vic.psy.ohio-state.edu/index.html>
- University College London, Department of Phonetics and Linguistics, Speech Data
<http://www.phon.ucl.ac.uk/resource/data.html>
- Center for Spoken Language Understanding @ OGI (Oregon Graduate Institute of Science and Technology):
<http://cslu.cse.ogi.edu/corpora/corpCurrent.html>
- Linguistics Data Consortium at The University of Pennsylvania
<http://www ldc.upenn.edu/>
- Speech Accent Archive

<http://classweb.gmu.edu/accent/>

- The Nationwide Speech Corpus

<http://ling.northwestern.edu/~cci623/nsp/index.html>

- Origins of New Zealand English (ONZE) Project

<http://www.ling.canterbury.ac.nz/jen/onzeminer/>

Sample database studies:

Come to class in weeks 2 and 3 with a brief description of the study and a question/issue to discuss. Focus on the database design and its application to the central issue of the paper.

Dani Byrd (1994). Relations of sex and dialect to reduction. *Speech Communication*, 15: 39-54.

P. Keating, D. Byrd, E. Flemming, & Y. Todaka. (1994) Phonetic analyses of word and segment variation using the TIMIT corpus of American English. *Speech Communication*, 14:131-142.

Alan Bell, Daniel Jurafsky, Eric Fosler-Lussier, Cynthia Girand, Michelle Gregory, and Daniel Gildea (2003). Effects of disfluencies, predictability, and utterance position on word for variation in English conversation. *J. Acoust. Soc. Am.* 113, 1001-1024.

Valerie Hazan and Duncan Markham. (2004). Acoustic-phonetic correlates of talker intelligibility for adults and children. *J. Acoust. Soc. Am.* 116, 3108-3118

Keith Johnson (2003) Massive reduction in conversational American English. *Proceedings of the Workshop on Spontaneous Speech: Data and Analysis*. August, 2002. Tokyo, JP.

WEEK	TOPIC
1	<ul style="list-style-type: none">• General Intro. 1: Inter- and Intra-Talker Variability.• General Intro. 2: Second Language Phonetics & Phonology
2	<ul style="list-style-type: none">• General Intro. 3: Second Language Phonetics & Phonology contd.• Sample Database Reports• Sample Database Reports contd.
3	<ul style="list-style-type: none">• Database design & analysis plan
4	
5	
6	
7	
8	<ul style="list-style-type: none">• Database analysis
9	<ul style="list-style-type: none">• Write-up
10	<ul style="list-style-type: none">• Reading Week
11	<ul style="list-style-type: none">• Exam Week