

Using Speech Community Data as Phonological Evidence

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September 16, 2011

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Outline

Introduction

Motivations

Goals

Data

Phonology-Phonetics Interface

Universal Phonetic Implementation

Exemplar Theory

Language Specific Phonetics

Identifying Phonological Processes

/ey/ Introduction

Analysis

Phonological Description

The Unique View of Diachrony

Conclusion

Motivations

Phonological Context

“Classic” Evidence

- Alternations / Static Distributions.
- Drawn from introspection / Small number of informants.

LabPhon

- Experimental Measures (acoustic, articulatory, judgments).
- Drawn from standard pools of experimental subjects.
- Frequently expressing concerns about the validity of Classic phonological evidence.

Motivations

Sociolinguistic Context

Linguistic Theory

- Variable Rules
- Lexical Phonology (Guy, 1991a;b)
- Exemplar Theory

Variation Theory

- What is changing where, and how?
- What can influence variation?

Social Theory

- How does one construct and project their identity?

Motivations

Sociolinguistic Context

Research Focus of Papers in the Proceedings of NWAV

	Linguistic	Variation	Social	Etc.
NWAV 37	2	8	4	–
NWAV 38	1	12	4	2

Motivations

Using Variation for Phonological Argument

Andries Coetzee

- ~ Frequency biases in phonological variation, *NLLT* (w/ Shigeto Kawahara)
- ~ The place of variation in phonological theory, *The Handbook of Phonological Theory. 2nd Edition* (w/ Joe Pater)
- ~ ...

Ricardo Bermúdez-Otero

- ~ Cycles and continua: on unidirectionality and gradualness in language change *Handbook on the history of English* (w/ Graeme Trousdale)

2007 Diachronic phonology *The Cambridge handbook of phonology*

- ~ ...

Goals

- Identify how sociolinguistic data can be used for phonological theory building.
- Identify how sociolinguistic data can be used for identifying and specifying phonological phenomena.
- Identify the ways in which sociolinguistic data achieves these goals uniquely.

Data Sources

Philadelphia Corpus

Automatically extracted vowel measurements from 272 Philadelphia speakers interviewed between 1973 and 2010. Dates of birth ranging from 1888 to 1991.

Atlas of North American English

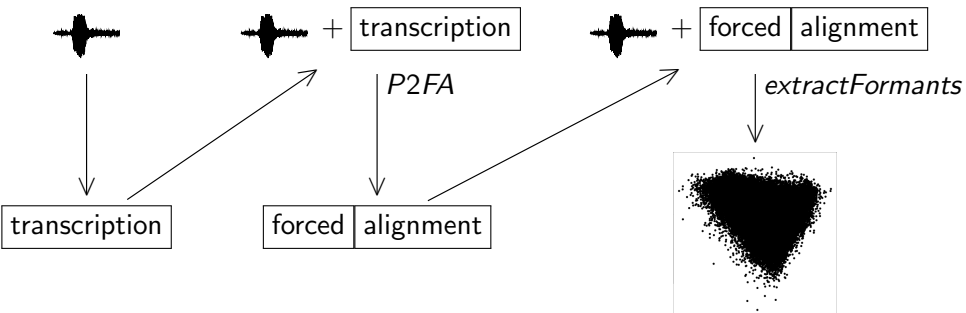
Acoustic vowel measurements from survey respondents in the Atlas of North American English.

Sociolinguistic Literature

Various accounts of sound change in progress from the sociolinguistic literature.

Philadelphia Corpus

FAAV Project



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Options

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- Language Specific Phonetic Implementation
- Exemplar Theory

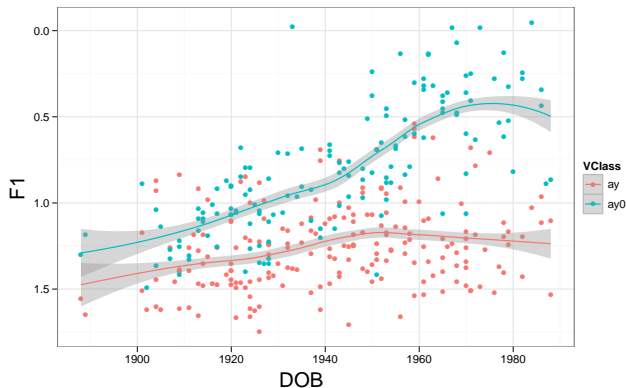
Phonology-Phonetic Interface

Linking Hypothesis

All I have to work with is phonetic measurements, so settling on a PH-interface model is crucial in order to make any connection to phonological theory at all.

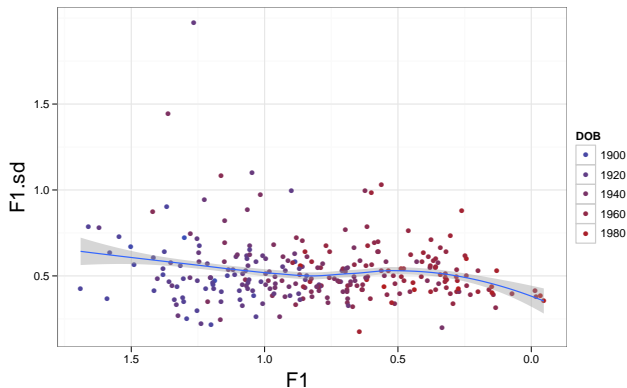
Phonology-Phonetic Interface

Continuous Change



Phonology-Phonetic Interface

Continuous Change



Phonology-Phonetic Interface

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Phonology-Phonetics Interface

Category Shifts

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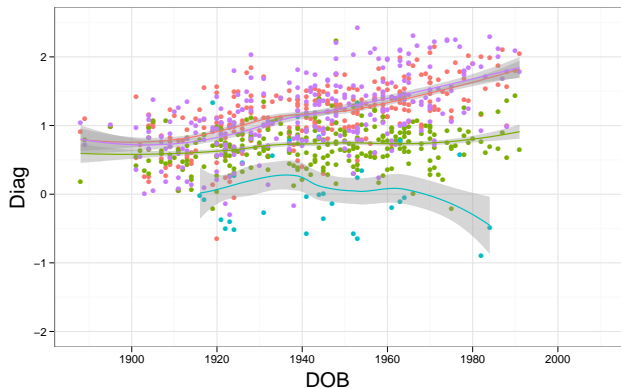
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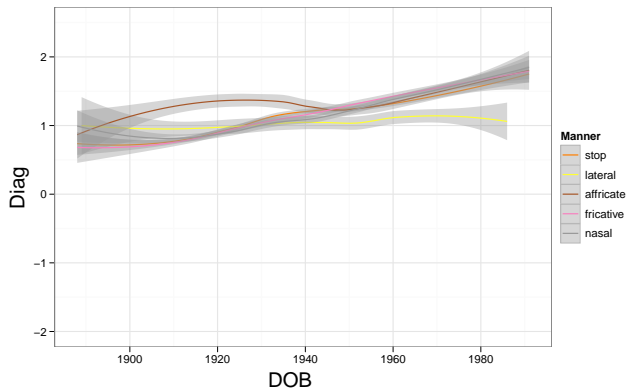
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Syllabic Context



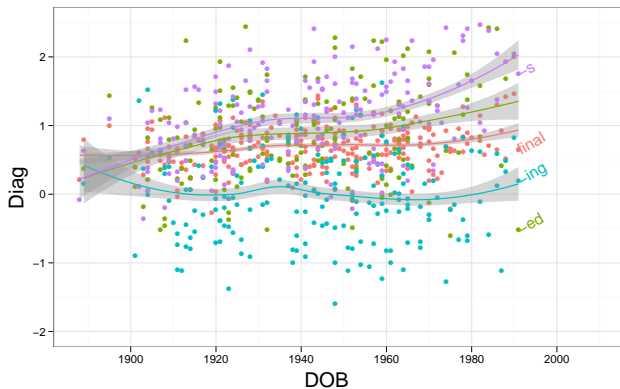
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Segmental Context



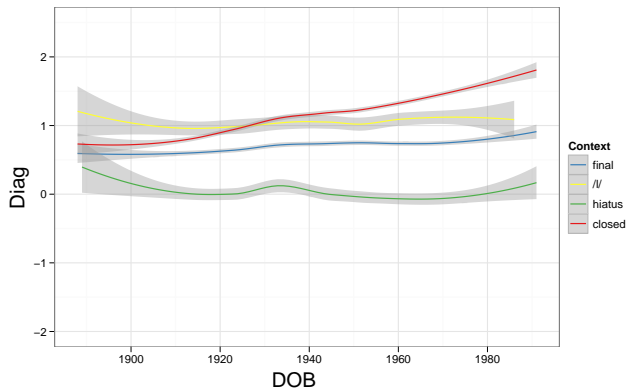
Phonology-Phonetic Interface

Morphological Interaction



Phonology-Phonetic Interface

Morphological Interaction



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