

Bringing semantics to sociophonetics: Social variables and secondary entailments

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LabPhon 11 -- Wellington, NZ -- 1 July 2008

Introduction

- In this session, one of the organizing questions is: *Is social information stored with phonetic information in the lexicon?*
- But... phonetic information isn't the only relevant kind of information in the lexicon.
- We also have information about meaning.
- This talk is about what that other information can tell us about whether social information is also in the lexicon.

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Goals of Presentation

- Take stock of the classifications of lexical meaning that formal semanticists use – and the tests they use to distinguish these different types – in order to provide new tools for those interested in social meanings.
- Illustrate how these tests can be applied to sociophonetic variables and can be implemented in a laboratory setting.

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Social Meaning

- *social meaning*: the variant of a social category associated with a particular sound
- phonetic variation can be linked to social categories in both production and perception
- e.g.: variation in /ai/ in American English is associated with being from the South: monophthongal [a:] “means” *this talker is from the South*, while diphthongal [ai] “means” *this talker is not from the South*

Monophthongal [a:]:  Diphthongal [ai]:  See Plichta and Preston (2004)⁴

How to Decide if Social Meaning is in the Lexicon

Two basic choices:

- A: Have an explicit definition of the lexicon and what it contains; determine whether social meaning matches this definition.
- B: Compare social meaning to other linguistic constructs in the lexicon; if they share properties, they are likely to be stored in the same place.

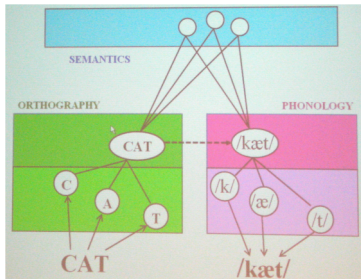
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Our Choice

- Because we don't currently have an agreed-upon definition of the lexicon, we'll try choice B.
- A logical starting point is to compare social meaning to lexical meaning (not, e.g., sound structure or syntax).
- So . . . what do we know about lexical meaning? For starters, we know that it's part of semantics.

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“Semantics”: Not Just a Blue Box



Just one example of how semantics is often portrayed in illustrations of the linguistic system . . .

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Formal Semantics

- The basic tool of semanticists is the evaluation of **entailments**.
- Entailment is a relationship between the meanings of two sentences. If one sentence is necessarily true whenever the other is, the first sentence is entailed by the other sentence.
- Here’s an example . . .

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Entailment

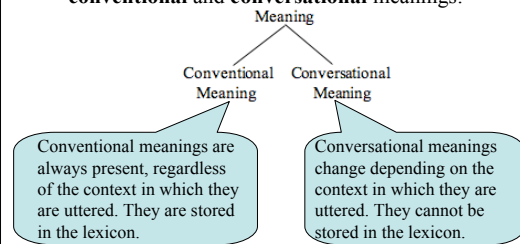
- (1) Three students passed the test.
- (2) At least one student passed the test.
- (3) Three students ate ice cream.

- Sentence (1) entails sentence (2).
- Sentence (1) does not entail sentence (3).
- As we will see, different patterns of entailment will distinguish different kinds of meaning.

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Lexical vs. Non-lexical Meanings

- The first divide in types of meaning is between **conventional** and **conversational** meanings:



Meanings That Aren’t In The Lexicon: Conversational

- Because they are context-dependent, conversational meanings cannot be stored in the lexicon.
- Example:

Context A: Do students ever switch subfields?

- (4) Kathleen, a phonologist, stopped studying syntax.
 ✓ Students sometimes switch subfields.

Context B: Do all phonologists study syntax?

- (4) Kathleen, a phonologist, stopped studying syntax.
 ✓ Not all phonologists study syntax.
 ✗ Students sometimes switch subfields.

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Social Meaning: Not Conversational

- Although it might seem intuitive to think that social meaning is in the realm of pragmatics and therefore is a type of conversational meaning, there is no compelling evidence of this.
- In fact, many previous sociophonetic studies have suggested that the social meaning of a phonetic variant is consistent across contexts.
 - e.g. Purnell et al. (1999), *inter alia* (Individuals can infer social-group membership from distinctive patterns of phonetic variation)
 - e.g. Hay et al. (2006), *inter alia* (Social expectations affect phonetic labelling)

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Meanings That Are In The Lexicon: Conventional

- If social meaning is not analogous to conversational meaning, is it analogous to conventional meaning?
- Conventional meanings are context-independent: they stay the same regardless of context.
- Example:

Context A: *Do students ever switch subfields?*

(4) Kathleen, a phonologist, stopped studying syntax.

✓ Kathleen stopped studying syntax.

Context B: *Do all phonologists study syntax?*

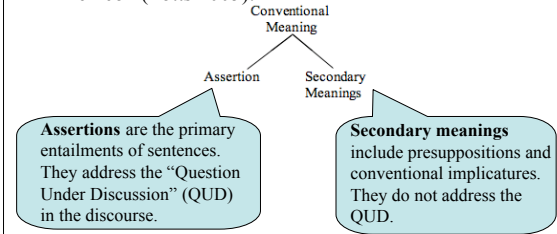
(4) Kathleen, a phonologist, stopped studying syntax.

✓ Kathleen stopped studying syntax.

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Types of Conventional Meanings

- There are two main types of conventional meaning, both of which are considered to be in the lexicon (Potts 2005):



Examples of Assertion and Secondary Meanings

(4) Kathleen, a phonologist, stopped studying syntax.

- Assertion:

- Kathleen stopped studying syntax.

- Secondary Meanings:

- Kathleen once studied syntax. (Presupposition)
- Kathleen is a phonologist. (Conventional Implicature)
- Kathleen exists. (Presupposition)

- These meanings are all entailments of (4).

Is social meaning like the relation between these two?

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Or is it more like the relation between these two?

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Examples of Assertion and Secondary Meanings

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- Assertion:

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- Secondary Meanings:

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- These meanings are all entailments of (4).

Or is it unlike either one?

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Testing Assertion vs. Secondary Meanings: Answers to Yes/No Questions*

- One property that distinguishes assertions from secondary meanings is whether they respond to the “Question Under Discussion” (QUD).
- Only assertions respond to the QUD.
- Thus, only assertions can be rejected by a listener using a direct negation like “no, that’s not true.”
- Secondary meanings require an indirect rejection such as “hey, wait a minute, I didn’t think that...”.

*Traditionally known as the “Hey Wait A Minute” test (Shannon 1976, *inter alia*).

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Yes/No Questions Example

(4) Kathleen, a phonologist, stopped studying syntax.

Possible Responses:

- ✓ No, she didn't stop studying syntax.
(Assertion)
- ✗ No, she isn't a phonologist.
(Secondary Meaning)
- ✓ Hey wait a minute, she's not a phonologist.
(Secondary Meaning)

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Does Social Meaning Get Directly Negated?

- Monophthongized [ai] means "Southern" in American English. (Plichta and Preston 2004)
- If this social meaning were an assertion, we'd expect the "Southern" association to be able to be directly negated.
- If it were a secondary meaning, we'd expect the "Southern" association to be only indirectly negatable.

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If Social Meaning Is Like Secondary Meaning:

- Person A orders pie. Person B asks:
(5) Oh, is p[ɑ:] their specialty?
- Person A responds:
 - ✗ No, you're not from the South. (Direct negation of social meaning)
 - ✓ Hey wait a minute, I didn't know you were from the South. (Indirect negation of social meaning)

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A Pilot Experiment

- Used a questionnaire to gather native speaker intuitions about different possible responses to yes/no questions with monophthongized or diphthongized /ai/ vowels.
- Listeners were given a list of possible responses and indicated which of those responses they thought were appropriate.

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Example

Two OSU freshmen who live on the same hallway but haven't interacted much decide to go out for lunch soon after the school year begins. Person A orders pie. Person B asks:



A: (choose any/all you find acceptable):

1. No, it's the chocolate cake.
2. Wait a sec - are you from the South?
3. No, you're not from the South.
4. Hey wait, it's the chocolate cake.

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Preliminary Results

- Native speakers preferred:
 - direct negation of assertions
 - indirect negation of social meanings
- Native speakers dispreferred:
 - indirect negation of assertions
 - direct negation of social meanings
- Social meanings appear to pattern like secondary meanings.

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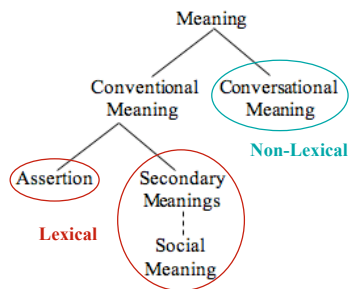
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Conclusions

- Social meanings pattern like secondary meanings with respect to answers to yes/no questions.
- Because of this and other parallels with secondary meanings, social meanings are likely to be stored in the lexicon with phonetic information, just as secondary meanings are.
- Thus, using semantic tests has the potential to shed light on questions of interest to sociophoneticians.

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Meaning: The Revised Version



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Where To Go From Here

- Conduct further experiments to verify the parallels between social meanings and secondary meanings; see whether there are also differences between them.
- Test other sociophonetic variables to see whether *all* social meanings are parallel to secondary meanings.
- Include other semantic tests; see which of different secondary meanings (e.g., presupposition vs. conventional implicature) social meanings are most like.

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Acknowledgments

- Mary Beckman
- Kathryn Campbell-Kibler
- Cynthia Clopper
- Eunjong Kong
- Tom Lindsay
- Nicolai Pharao
- Kiyoko Yoneyama
- OSU Phonies

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