Ambiguity and vagueness in historical change

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The Changing English Language: Psycholinguistic Perspectives

Outline of talk
- Introduction
- Participants
- Incomplete knowledge
- Ambiguity vs. vagueness
- Lexical change
- Pure word class change
- Chunking
- Structural change
- Closing remarks

Intro

Participants
- SP/W = speaker/writer
- AD/R = addressee(s)/reader

- Historical linguist is also R for written data, but
  - potentially more knowledgeable than intended readership
  - probably ignorant of cultural and pragmatic facts obvious to contemporary reader
  -≈ normal AD for recent audio broadcast or telephone data (but can listen repeatedly)
  - with audio conversational data, probably lacks non-verbal communication available to actual AD

Incomplete knowledge
- Ambiguity
  - AD/R cannot be sure which of two (or more) analyses was intended by SP/W, and something hangs on choice.
  - Uncertain analysis may concern (e.g.) lexical semantics, syntactic structure, lexeme boundaries.
- Vagueness
  - Linguistic analysis in some respect underdetermined, equally for SP/W and AD/R
  - No further info needed for interpretation

Psychological difference
- Relevant kind of vagueness concerns properties normally specified (otherwise would be unlimited).
  - A priori, vagueness less costly psychologically than ambiguity
  - ambiguity: AD/R may need to explore alternatives – though evidently they often don’t
  - vagueness: no need to back up and try again

Traugott & Trousdale (2013: 199-200), Felser (this workshop)
Historical change

- What is relevance of incomplete knowledge to historical change?
- To what extent can ambiguity and vagueness be distinguished synchronically in historical texts?

Lexical change

Bridging context

- More than one interpretation of word possible in context, possibly only subtly different
- ‘Wrong’ selection by AD/R (≠ SP/W’s intention) →
  - unrecognised misunderstanding, often harmless
  - linguistic innovation = actuation of potential change
- By definition, must arise from ambiguity, not vagueness.

Bridging contexts: example 1

- Classic example: early history of still adv.
  2. ‘motionless’ (OE- )
  3a. ‘without change’ (ME-?lModE obs.)
  4a. ‘now as formerly’ (1535- )
- Bridging context:
  One generaciõ passeth away, another commeth, but the earth abydeth still.
  (1535, not OED)
- Reasonable to invoke ambiguity here, but can bridging contexts involve vagueness too?

Bridging contexts: example 2

- quantum jump (1924- ) or quantum leap (1930- ) = change of energy level in electrons
- physicist: smallest possible change, up or down; quantum foregrounded
- lay-person: ‘A sudden, significant, or very evident (usually large) increase or advance’ (1956- ); leap foregrounded
  This weekend, Network Rail trumpeted the arrival of the new timetable and the completion of the west coast work. “The achievement is massive, and the result will be a quantum leap in services,” it said in a statement. (2008)
- Hard to imagine bridging context.
Bridging contexts: example 2

- Earliest metaphorical uses outside sub-microscopic domain are to do with development of weapons:
  The time has come for a quantum jump in our planning (to borrow a metaphor from our scientist friends)—that is to say, that we should now make an intensive effort to get ahead with the super [hydrogen bomb]. ([1949, OED])
- Initial difference from technical term involves vagueness in semantics, not ambiguity.
- Invited inferences ('improvement/increase', 'large step') located in pragmatics before becoming semanticised.


Bridging contexts: example 3

- In basic sense 1a, semantics of discrimination carries no value judgement – so is vague in that respect
- Invited inference that discrimination is good (sense 4) or bad (sense 6) would belong to pragmatics and involves context and collocation.
  - e.g. via ellipsis of against-PP or of a premodifier like racial for sense 6.

Pure word class change

Well-studied type: N → Adj

- Nouns (esp. recently) may develop Adj usage alongside existing N distribution:
  - fun, key, ace, amateur, apricot, core, bandaid, cardboard, champion, corker, cowboy, dinosaur, draft, freak, genius, killer, landmark, luxury, niche, pants, powerhouse, rubbish, surprise, Velcro...
- N and Adj are distinct word classes with some properties in common.

Denison (2013; in prep.)
Syntactic ‘bridging contexts’

Premodifier of head noun: N or Adj

Gold is real money and paper is pretend money. (1974, OED)

That’s why inflation money is false purchasing power. (1946, WebCorp)

- Predicative complement (N only if mass noun or plural):

  a third of the pictures are beautiful, but I think two-thirds of the pictures are fakes (BNC)
  His gentleness was fake (BNC)

- Word class underdetermined in these syntactic contexts (though may be known from distribution elsewhere)

Word order

- Modifying adjectives usually precede modifying nouns
- Modifying N before Adj only if Adj is a classifier

<table>
<thead>
<tr>
<th>D</th>
<th>Adjective zone</th>
<th>Modifying noun zone</th>
<th>Head noun</th>
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</thead>
<tbody>
<tr>
<td>a big tourist</td>
<td>attraction</td>
<td></td>
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<tr>
<td>a garish big expensive London tourist</td>
<td>attraction</td>
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<tr>
<td>*a tourist big attraction</td>
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Early history of core: only N

- Certain frequent collocations place core in pre-modifying function, a syntactic bridging context:
  ‘Shall there be a core curriculum in secondary schools?’: a symposium. (1935, OED)
  in relation to our guiding ethical principles and core values and laws in American democracy (1975, COCA)
  the core ideas of Jung and LeviStrauss (1982, COCA)
- It remains N, even here.
- Acquisition of Adj behaviour is generally step-wise rather than all at once.

Core: Adj too (not intended to show chronology)

- Before a non-classifier Adj:
  once you get away from the core big jobs in government -- like the President, his staff [...]. (2001, COHA)
  Tackling these jobs beyond Europe should be a core new mission of NATO (2009, COHA)
- With intensifier:
  Anything that was so core to the election (1995, COCA)
  It is very core to our program strategies (2001, COHA)
- In comparative or superlative:
  in my life and my most core beliefs (2007, COCA)
  there is something central, something core, in everyone’s experience of shame (2004, WebCorp)

Mixed community

- During period of transition, three groups of speakers:
  - Group 1 (most conservative): only have core = N
  - Group 2: core = N and core with some but not all Adj properties (perhaps to be differentiated further)
  - Group 3 (most advanced): core = N and core = Adj
- Can produce as SP/W (and accept as AD/R):

<table>
<thead>
<tr>
<th>Denison (2000; 2013)</th>
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<tbody>
<tr>
<td>X takes D as dependent</td>
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<td>XP can be subject, direct object, indirect object, complement of preposition</td>
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<tr>
<td>X can postmodify N</td>
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<tr>
<td>X takes intensifier as dependent</td>
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<tr>
<td>X can premodify N</td>
</tr>
<tr>
<td>XP can be predicative complement</td>
</tr>
<tr>
<td>[various features characteristic of V, e.g. tense]</td>
</tr>
<tr>
<td>[various features characteristic of other PoS]</td>
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<tr>
<td>X inflects for plural</td>
</tr>
<tr>
<td>X inflects for genitive</td>
</tr>
<tr>
<td>X can be marked for comparative and superlative</td>
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</tbody>
</table>
Word class may depend on SP/W

- Typical example of core in ‘bridging context’:
  [...] to include only academic content (2006, COHA)
- For Group 1 SP/W, example contains core as N.
- For Group 2 or 3, vague between N and Adj.
  - SP/W and AD/R in these groups don’t need to decide.
  - For AD/R, cf. ‘good enough’ analysis in psycholinguistics
  - Distinction for linguist would be arbitrary. No semantic or structural ambiguity. Choice only affects labels.

Can word class be vague?

- “No”
  There is no evidence I am aware of that SPs/Ws create underspecified syntactic representations. (Claudia Felser, p.c.)
- “Problematic”
  Re underspecification, the problem I see is a logical one. [...] In other words, every time you assume underspecification you assume a supercategory which may well conflict with other supercategories. Either that’s a strong testable hypothesis (and you’ll never actually need conflicting supercategories), or it’s wrong. (Dick Hudson, p.c.)
- Response to Hudson
  - Possible conflicts so far involve Adj (with N, D, V, Adv), and some with Pronoun and Modals – if separate word classes.

Can word class be vague?

- “Maybe”
  - Partial underspecification is compatible with rule-based, compositional models (Paul Kiparsky, p.c.)
    [...] even if [such words as fun] are underspecified in the mental lexicon, it’s also possible that they always get fully specified in actual sentences. I don’t see any way to decide between these possibilities on the basis of linguistic evidence. Perhaps there could be psycholinguistic experiments? (Kiparsky, p.c.)
- Response:
  - Challenge idea that every word in sentence must be assigned unique word class in linguist’s grammatical representation.
  - Query whether SP/W’s mental grammar must use word classes, and if so, and must always specify them.

Is word class always stored?

- Proper names can appear in Adj-like contexts:
  - It’s very silly, it’s very odd, it’s very Woody Allen. (2008)
  - This is so Woody Allen. Neurotic as ever and [...] on top of his game. (2000)
  - Counter-intuitive to suggest that speakers store Woody Allen and any other name as both (Proper) Noun and Adj ‘just in case’.
    - Note anaphora in last example.
  - Better interpretation: ‘wrong’ word class coerced by construction.
- Word class as epiphenomenon in Construction Grammar

Lexeme boundaries

- A word class must be assigned to a word (lexeme).
- Can knowledge of extent of lexeme be incomplete in:
  - mental lexicon?
  - linguist’s grammar?
- Non-compositional a lot of as unit vs. modifiable lot (a whole lot of)
- Many overlapping prefabs in the sort of family:
  - kind of, all kinds of, what kind of, those sort of, sort of thing, etc.

Denison, ‘Ambiguity & vagueness’
Complex prepositions

- *Behalf* analysed as N, head of NP:
  
  - on behalf of his country (PPCMBE) [av [r on] [ov [s, behalf] [av [r of] [av his country]]]
- Justified by varied distribution of *behalf* in PPCMBE (1700–1914)
- Same analysis in *Cambridge Grammar*, citing alternations like
  
  - on his country's behalf
  - on X's behalf
  - on that behalf
- but PDE ≠ 18–19C English

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>in behalf of X</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>in the behalf of X</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>in X's behalf</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>in that behalf</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>on behalf of X</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>on the behalf of X</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>on X's (own) behalf</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>48</td>
<td></td>
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Huddleston & Pullum (2002: 608–9)

Complex prepositions

- Alternative analysis as *[s on behalf of]* supported e.g. by
  
  - infrequency of interruption
  - possibility of substitution
  - different distribution of *on behalf of X* and *on X's behalf*
  
  (common nouns vs. proper nouns or pronouns)
- Choice affects word class but structure too
- Both analyses available to AD/R
- Ambiguity rather than vagueness, though arguable
  
  whether anything hangs on choice

Hoffmann (2005), Denison (2010: 118–22), Bybee & Beckner (2014: §5.3)

Structural change

- Diachronic change between different synchronic stages often involves structural change, as seen in
  
  - lexicalisation: complex prepositions, etc.
  - grammaticalisation: auxiliary verbs, *be going to*, etc.
  - other: prepositional passive, prepositional verb *run over* > phrasal verb, *sort of*, etc.
- Most (all?) reanalysis/neoanalysis can be reduced to pattern-matching to a different pattern from earlier stage.
- Ambiguity as defined here (SP/W’s choice unknown to AD/H) may not be necessary.

De Smet (2009; 2012), Traugott & Trousdale (2013), etc., etc.

Problems and questions

- Ambiguity – structural change deserves more attention.
- More on differentiating ambiguity and vagueness in their diachronic effects.
- Do they differ in historical stability?
- How to constrain vagueness to relevant properties.
  
  - Perhaps need functions like attribute and classifier rather than, or as well as, word class categories like N and Adj.
  - Striking frequency in recent decades of N > Adj transitions. Perhaps type frequency relevant after all? (cf. ‘gang effect’)


Closing remarks

Denison, ‘Ambiguity & vagueness’
Thanks for comments

- Tine Breban, Claudia Felser
- (in reaction to earlier paper) Dick Hudson, Paul Kiparsky

References


Presentation available

- slides online at
  
  http://tinyurl.com/DD-download

- work-in-progress
- comments very welcome, but please don’t quote

Thank you!