



Ambiguity and vagueness in historical change

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Ambiguity and vagueness in historical change

David Denison

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

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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

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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

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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), Felsler (this workshop)

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Historical change

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

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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.

Evans & Wilkins (1998; 2000: 549-50), Diewald (2002), Heine (2002)

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Bridging contexts: example 1

- Classic example: early history of *still* adv.
 2. 'motionless' (OE-)
 - 3a. 'without change' (ME-?IModE *obs.*)
 - 4a. 'now as formerly' (1535-)
- Bridging context:

One generaciō passeth away, another commeth, but the earth abydeth still. (1535, not *OED*)
- Reasonable to invoke ambiguity here, but can bridging contexts involve vagueness too?

OED Online, OED Dictionary Browser

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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.

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Bridging contexts: example 2

- Borrowing between technical jargons and everyday speech ≈ language contact, therefore extra-systemic?
- Even in quantum mechanics, unclear if minimal/single-quantum size of jump is part of denotation or connotation.
- Perhaps (*pace OED*) not part of semantics at all:

Niels Bohr demonstrated that electrons jump from one energy state to another in discontinuous 'quantum leaps', the size of the leap depending on how many quanta of energy they have absorbed or given off. (1990)
- Bridging context could then be 'non-smooth transition' (cf. *step change* in management jargon)

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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.

Traugott & Dasher (2002), Mosegaard Hansen & Waltereit (2006)

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Bridging contexts: example 3

- *discrimination* n.
neutral: 1a. The action of perceiving, noting, or making a distinction between things 1621-
†3. The fact or condition of being differentiated. (1666-1867)
positive: 4. The power or faculty of [...] of making exact distinctions; discernment. (1764-)
negative: 6. orig. *U.S.* Unjust or prejudicial treatment of a person or group, esp. on the grounds of race, gender, sexual orientation, etc. (1819-)
So long as the North treats the negro workman with blighting discrimination [...] (1906)

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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.

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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.)

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	N	Adj
X takes D as dependent	+	?-
XP can be subject, direct object, indirect object, complement of preposition	+	-
X can postmodify N	-	+
X takes intensifier as dependent	-	+
X can premodify N	+	+
XP can be predicative complement	+	+
[various features characteristic of V, e.g. tense]	-	-
[various features characteristic of other PoS]	-	-
X inflects for plural	+	-
X inflects for genitive	+	-
X can be marked for comparative and superlative	-	+

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Syntactic 'bridging contexts'

- Adj** **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)
- N**
- **Predicative complement** (N only if mass noun or plural):
N a third of the pictures are beautiful, but I think two-thirds of the pictures are fakes (BNC) **N or Adj** **Adj**
 His gentleness was fake (BNC)
 - Word class underdetermined in these syntactic contexts (though may be known from distribution elsewhere)

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Word order

- Modifying adjectives usually precede modifying nouns
 - Modifying N before Adj only if Adj is a classifier
- Determiner Adjective(s) Modifying Noun(s) Head Noun

D	Adjective zone	Modifying noun zone	Head noun
a	big	tourist	attraction
a	garish big expensive	London tourist	attraction
*a	tourist	big	attraction

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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.

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	N	Adj
X takes D as dependent	+	?-
XP can be subject, direct object, indirect object, complement of preposition	+	-
X can postmodify N	-	+
X takes intensifier as dependent	-	+
X can premodify N	+	+
XP can be predicative complement	+	+
[various features characteristic of V, e.g. tense]	-	-
[various features characteristic of other PoS]	-	-
X inflects for plural	+	-
X inflects for genitive	+	-
X can be marked for comparative and superlative	-	+

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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 [...] (1991, COHA)
 Tackling these jobs beyond Europe should be a core new mission of NATO (2003, COHA)
- **With intensifier:**
 Anything that was so core to the election (1995, COCA)
 It is very core to our program strategies (2011, web)
- **In comparative or superlative:**
 in my life and my most core beliefs (2007, COCA)
- **As post-modifier:**
 there is something central, something core, in everyone's experience of shame (2004, WebCorp)

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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):

	Examples that must be N	Examples that could be vague N - Adj (but N for group 1)	Examples that must be Adj
Group 1	+	?+	-
Group 2	+	+	?
Group 3	+	+	+

Denison (2010; 2013)

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Word class may depend on SP/W

- Typical example of *core* in ‘bridging context’:
[...] to include only core 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.

Christianson et al. (2001), Ferreira et al. (2002), Ferreira & Patson (2007), Felsler 26

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.

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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.

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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 so 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

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Chunking

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.*

Traugott & Trousdale (2013: 27), Bybee & Beckner (2014: §3.3)

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Complex prepositions

- *Behalf* analysed as N, head of NP:
on behalf of his country (PPCMBE)
[[_{PP} [_P on] [_{NP} [_N behalf] [_{PP} [_P of] [_{NP} 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
- but PDE ≠ 18-19C English

Pattern	N
<i>in behalf of X</i>	6
<i>in the behalf of X</i>	2
<i>in X's behalf</i>	6
<i>in that behalf</i>	16
<i>on behalf of X</i>	11
<i>on the behalf of X</i>	1
<i>on X's (own) behalf</i>	6
Total	48

Huddleston & Pullum (2002: 618-23)

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Complex prepositions

- Alternative analysis as [_P *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: §3.3)

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Structural change

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.

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Closing remarks

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')

Bolinger (1963), Denison (2013: 174), Bybee & Beckner (2013)

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Thanks for comments

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

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Presentation available

- slides online at

<http://tinyurl.com/DD-download>

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

Thank you!

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