Lexical pragmatics and the weakness of belief

Daniel Rothschild Pragmatics reading group, 2015

Lexical pragmatics

I'll call modulation of meaning any kind of variance in the meaning of a term that doesn't seem to originate in genuine lexical ambiguity. Observations that such variation are found for instance in Chomsky: even once we restrict to 'bank' as financial sense sometimes it can mean a physical building, sometimes a company, etc.

Recanati, relevance theorists, various others, have argued such modulations (many focus on enrichments from what they take to be standard meanings, rather than cases like the above of polysemy) feed into the compositional semantics: so we do not have single core meaning feeding into compositional rules and then get modulation of whole sentential meaning afterwards. So pre-compositional.

Standard argument: modulations under embeddings:

(1) Everyone billionaire who bought a bank regretted it in 2008.

I'll reserve for term 'modulation' for such embeddable pre-compositional variance. These include not just canonically polysemous terms but like 'bank', 'country' etc, but also examples where there is potential 'enrichment' of a base meaning, such as these quasi-metaphorical uses:¹

- (2) The parking machine spit out a ticket.
- (3) The words tumbled out of me.

These modulations (more clearly enrichments from a base) also embed as shown via similar tests to (1).

Debate

I'm going to focus here on what Recanati [2003, 2013] calls 'free enrichment': not forced by the syntactic or semantic features of the item itself. Much of the controversy over such enrichment focuses on logical terms such as quantifiers and connectives [Stanley, 2002, 2005].

To my limited knowledge, fewer voices *against* pragmatic modulation have looked at modulation of non-logical expressions. No one can deny that non-logical vocabulary such as 'bank' has different possible meanings that feed into the compositional machinery. Presumably pragmatic processes determine which meaning arises, nor is there any good argument that these distinct meanings correspond to syntactic distinctions or any form of indexicality.²

Over-generation argument with respect to lexical modulation. The argument would go as follows: lexical items could be modulated freely, then we would expect in the right context all these sentences could be synonymous

- (4) John danced on his keyboard.
- (5) John's fingers danced on his keyboard.
- (6) John's fingers moved in a dance-like manner on top of his keyboard.

But, in fact, it seems to me that while (5) cannot mean something like (6) except in a quite obviously metaphorical sense (and a strained one at that). One explanation of why we really feel the metaphorical-ness of (4) but not (5) is that there are constraints on enrichment processes so that (5) gets to mean (6) through some kind of direct pragmatic modulation, whereas (4) is an instance of genuine metaphor, in which we will assume what is happening is not the same as direct pragmatic modulation.³

That there are *constraints* on pragmatic modulation of non-logical lexical items is no argument against the process itself. Our cognitive systems may simply make some modulations of concepts easier than others: going from dance to having dance-like movement may be easier than going from dance to have some part (such as fingers) have a dance-like movement. More generally, (4) cannot mean that John walked on his keyboard or that he did a myriad of other things. Such constraints may arise from the cognitive process that controls lexical modulation.

One natural view: lexicon only specifies rough link between (non-

 $^{^{1}}$ I distinguish these from cases of 'genuine' metaphor where the literal meaning is saliently available. See Recanati [2003], Carston [2010] for different views here.

 $^{^{2}}$ For some reason an earlier version of me argued that fluctuation in the meaning of the word 'red' could be put down to indexicality, but such indexicality looks in all other respects like pragmatic modulation and the distinction between that view and the more pragmatically oriented view is irrelevant here [Rothschild and Segal, 2009].

³Though some such as Carston [2010] argue for a continuum.

logical) lexical items and a concepts, filling out that link in an individual sentence is a pragmatic process. Some talk metaphorically of semantics only as loose instructions to construct a meaning. In lexical case this suggests no one-to-one mapping between lexical items and concepts even as 'core meaning' so talk of 'enrichment' is not always right way of thinking of modulation.

When modulations happen?

In general, we would expect to find pragmatic modulation if and only if the following two conditions hold (assuming there is a root unmodulated meaning):

- (7) The modulated meaning is easily accessible with respect the particular lexical item being used.
- (8) The modulated meaning is a much more plausible candidate for the intended meaning of the sentence than the unmodulated meaning.

These constraints, if anything, might be *too strong* in two directions: they might rule out more lexical modulations than we do find, they also might rule in more lexical modulations than we do find.

Note that this would plausibly deal with some overgeneration problems. Only accessible modulations are found and only when they result in a much more plausible reading. If we go further and restrict these operations to non-logical vocabulary we have even further constraints.

Case study

Hawthorne et al. [2015]: we argue that verbs such as 'believe' and 'think' unambiguously express a weak mental attitude.

It is common in the philosophical literature is to read belief attributions as attributing very strong beliefs to the belief holder. Presumably this tendency comes from our ordinary ways of speaking:

(9) John believes that the bank is open.

This can convey (in contexts) the idea that John is confident the bank is open. Indeed, many philosophers explicitly argue that to believe something just is to have maximal credence in it. Others argue for slightly weaker formulation, like thinking something is significantly more likely than not.⁴ In any case you don't need to be a philosopher to see that the verb 'believe' makes easily accessible the concept 'have full (or very high) credence in'. Indeed often that's the concept it conveys.

What I want to argue is that despite this robust association between 'believe' and 'have strong/full confidence in' the lexical item 'believe' does not get to mean 'have full confidence in' via lexical modulation *even when such modulation is required for a coherent interpretation*.

Here are some examples to pick through:⁵

- (10) ?I don't believe it's raining, but I think it is.
- (11) ?Alfred thinks it's raining, but Mary *believes* it's raining.
- (12) ?Tim think it's raining though he doesn't go so far as to believe it.
- Bob: Would you say you believe it's raining.Alice: ? No but I'd say I think it's raining.

Contrast 'love' versus 'like', 'huge' versus 'tall' in similar examples. Obvious conclusion: we cannot get a reading of this sentence where 'think' has a weak reading and 'believe' has strong reading (or vice versa).⁶

Weak readings

Do 'think' (and 'believe') have weak reading? Plenty of evidence:

- (14) Who do you think will win the election?Who are you confidence will win the election?
- (15) I think John will win, but I'm not at all sure.

Neg raising:

(16) I don't think John will win \rightsquigarrow I think John won't win.

All neg-raising terms seem to be weakest of their kind: 'like' versus 'love', 'advise' versus 'command', 'want' versus 'need'.

 $^{{}^{4}\}mathrm{I}$ am thinking here of Levi, Williamson, Clarke, as some examples of the full-credence view, see Hawthorne et al. [2015] for these and other references.

⁵Some are from Yalcin (p.c.).

 $^{^{6}}$ Similar constructions like 'being of the opinion that' also pattern this way.

Missing strong reading

The missing reading then from 'believe' in examples (10) to (13) is then the strong one. But how do we explain this except to suppose that pragmatic modulation is *not available* contra expectations. In this case the missing reading is both clearly salient and would make the sentences coherent. Since they are not coherent pragmatic modulation does not occur.

Uniform readings in one context

One hypothesis: 'think' and 'believe', despite some linguistic differences, map to the same concept. Enrichments are by concept not by lexical item and uniform within sentence. This explains what is wrong with (10) to (13). It does not explain these examples though:

(17) ?I don't think he'll win, but it's likely he will win.

Here there is no strong reading available for 'think'. This cannot just be obligatory neg-raising:

(18) I don't think he'll win, and I don't think he won't win.

For neg-raising is cancellable. But note that (18) suggests indifference about his winning, or no opinion, not a weak opinion.

Indeed Williamson (p.c.) reported to us (and I have mixed views) that even this combination is bad:

(19) I half-expect he'll win, but I don't go so far as to think he'll win.

It seems in general that the conditions for 'thinking p' as lexically encoded in the word are close to just thinking more likely than not. Moreover no shift in context seems to be able to force 'think' (or 'believe') to get a stronger reading inside the compositional semantics.

Where we are

A plausible response to the problem of overgeneration with pragmatic modulation was to suggest that a) the process is limited to non-logical vocabulary, b) only occurs when the modulations are cognitively accessible, and c) is limited to cases where the modulation would result in a more sensible interpretation. What I hope to have shown is that the interpretation of the simple non-logical lexical verbs 'believe' and 'think' show that these restrictions are insufficient.

This leaves us with a problem: what are the restrictions on pragmatic modulation?

Comparison cases

Other neg-raising terms presumably behave the same, i.e. not allowing free enrichment:

(20) I would like to dance but I don't want to dance.

Can't mean I have only a weak desire to dance. (Rather: interpretation require two sense of wanting?) In general explaining semantic deviances becomes difficult without tight constraints on pragmatic modulation:

(21) ?Suppose it's raining but it might not be raining.
Suppose it's raining, but I don't know it's not raining. [Yalcin, 2007]

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