Projective Meanings

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Projection and Presuppositions

Definition (Projection)

Semantic content p *projects* over an operator O *iff* p is part of the meaning of a constituent which O takes within its syntactic scope, and p is interpreted as not within the semantic scope of O

Definition (Presupposition)

An utterance of an expression E triggers a presupposition p if p is treated as established prior to utterance of E.

Range of presupposition triggers

- A vast array of expressions are now analyzed as presuppositional.
- These include definites, factive verbs, factive nouns, telic verbs, aspectual adverbs, sortally restricted adjectives, implicative verbs, clefts, and intonational backgrounding.
- Projection has long been taken to be the hallmark of all these presuppositional constructions (Langendoen and Savin 1971).
- In fact, projection tests have become the standard diagnostic.

Example of a projection test

Examples

(1) a. Patrick stopped drinking.
b. Patrick didn't stop drinking.
c. If Patrick stopped drinking, then he wrote that paper sober.

(2) a. $\rightsquigarrow$ Patrick drank.
b. $\not\rightsquigarrow$ Later sobriety.

Ergo. . .

Stop is a presupposition trigger, presupposing the pre-state.

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Range of Projective Meanings

- It is now broadly recognized that all that projects is not (standard, classical) presupposition.
- Elements of meaning lacking other standard characteristics of presupposition can also project.
- cf. Chierchia & McConnell-Ginet (1990) on non-restrictive relatives, Beaver (2001) on parentheticals.
- Levinson (1983), Kadmon (2001), and Simons (2005) observe that some conversational implicatures. project
- Potts (2005) takes robust projection behavior to be a core property of the components of meaning he classes as *conventional implicatures*.

Projection for Potts' Conventional Implicatures

Examples

(3) *Politeness morphemes*

a. Si c'est vrai que vous avez deja mangé, je vous offre un cognac.

b. $\rightsquigarrow$ Speaker in deferential position wrt hearer.

(4) *Appositives*

a. If Patrick, a big drinker, is here, we'll have fun.

b. $\rightsquigarrow$ Patrick is a big drinker.

(5) *Expressives*

a. If that son-of-a-bitch Patrick's gone, he'd better not have finished my bottle of cognac.

b. $\rightsquigarrow$ Speaker has negative attitude towards Patrick.

Approximatives

- Approximatives (*almost*, *nearly*, *barely*) are analyzed by Horn (2002) as non-presuppositional (cf. his *assertoric intertia*).
- Yet they display projective behavior (though not as robustly as e.g. Potts CI's).
- Nb. on his analysis and Roberts (to appear) the same holds for exclusives (*only*, *just* etc.).

Examples

(6) a. If Hannibal nearly escaped, the guards will be in trouble.

b. $\rightsquigarrow$ Hannibal didn't escape.

Past explanations of projection

- Prior scholars have not considered the phenomenon of projection as a whole across expression types.
- So explanations have been piecemeal, applying to subclasses of projective meanings.
- Nonetheless, it is reasonable to ask of existing explanations both:
  1. how well they work in their intended domain, and
  2. whether they have potential to extend to the full range of projective meanings.

Common Ground Approaches

- The best known explanation of projection comes from Stalnaker (1973,1974), Karttunen (1974), Lewis (1979) and Heim (1983).
- The idea is that presuppositions involve constraints on the prior common ground.
- E.g. in (7), there would be a CG constraint that Mary has a sister.
- Since the existence of a sister would not otherwise be satisfied locally, it must be a part of the global CG.

Examples

(7) If Mary isn't here then she's at her sister's

First problem with the CG account

- It is far from clear whether even standard presuppositions triggers are consistently associated with CG constraints.
- E.g. what is the evidence that *know that p* requires *p* to be in the common ground? (See Simons 2003.)
- But even if we accept the story for standard presupposition triggers, there is no empirical support for extending the analysis to the full range of projective meanings.
- For example, the content of appositives (cf. *Patrick, a big drinker* above), which show robust projection behavior, is canonically intended as new information to the hearer.

Second problem with the CG account

- Not only was the CG account never claimed to describe the full range of projection behavior we observe, but generalizing it to all triggers of projective meaning would have undesirable consequences.
- E.g. for some triggers (most of Potts' CIs) accommodation would occur on nearly all occasions of use.
- Then accommodation, far from being a rescue strategy triggered by an apparent violation, would become the norm, and the idea of a prior common ground *constraint* would become essentially vacuous.

Third problem with the CG account

- There is a further reason to doubt that the standard CG analysis provides a sound general account of projection.
- Of all the expression types which have been claimed to impose constraints on the CG, anaphors are surely the clearest case, requiring that salience/familiarity of the antecedent is in the CG.
- But this requirement of anaphors is well-known to resist accommodation for canonical anaphors (pronouns and additives like *too*).
- If in the paradigm case of a CG constraint, accommodation is generally ruled out, then a theory in which accommodation of CG constraints is the norm would seem to be problematic.

Anaphoric accounts

- Another approach targeting standard presuppositions is based on the idea that presuppositions are a type of anaphor (van der Sandt 1992, Geurts 1999)
- Thus e.g. *her sister* in (7) (above) would require an anaphoric antecedent.
- In van der Sandt's DRT model, this would be preferably accommodated in the global DRS, thus producing the effect of projection.

First problem with anaphoric accounts

- Like the CG approach, the anaphoric account was never claimed to cover our full range of projective meanings.
- In fact, it would be unnatural to so extend it.
- There is no evidence that e.g. appositives, expressives, or approximatives carry anaphoric requirements.
- Indeed, we can give evidence against such a requirement, since a discourse can become ill-formed if there *is* an antecedent:

Examples

(8) #Patrick drinks a lot. Patrick, a big drinker, will be here soon.

Second problem with anaphoric accounts

- A second peculiarity of anaphoric accounts mirrors an issue observed above for CG accounts.
- The fundamental idea of these accounts is that we accommodate in order to provide anaphoric antecedents.
- Consider again paradigm cases of anaphoric presupposition, additives like *too* and pronouns.
- Strangely, these cases are well known *not* to readily allow accommodation.
- So what should be the paradigm cases have to be treated as exceptions.

Multi-component accounts

- Karttunen and Peters (1979) and Potts (2005) divide meanings into separate components (or *dimensions*).

Examples

(9) [Patrick, the son-of-a-bitch, owes me a drink] =
$\langle$ owes(me,patrick,drink), sob(patrick) $\rangle$

Multi-component accounts: independence

- In Potts Logic of CIs, the components are *independent*: once propositions are computed in a meaning component, they cannot interact with the other component.
- Potts claims this as a benefit, on empirical grounds, e.g. based on his claim that there is no binding between regular content and CIs.
- Note that his conclusions have been questioned as regards CIs by Amaral *et al* (2008), who provide evidence that there may be semantic dependencies between ordinary content and CIs.
- But it is anyway clear that independence is not a general explanation of projection, since since standard presuppositions do interact with ordinary content, and e.g. can be bound.
- This is perhaps the main reason why Karttunen and Peter's model was dropped as an account of presupposition.

At-issueness as a common property of projective meanings

- We now make an observation:
- Meanings project *iff* they are not at-issue.
- Our notion of *at-issueness* is taken from the question-based analysis of discourse of Roberts (1995).
- We illustrate the generalization using a new diagnostic test: asserted at-issue propositions can be the target of a (non-sarcastic) affirmation.
- Note that this diagnostic is partly inspired by the standard observation that presuppositions are not targeted by simple denials (cf. Shanon 1976 and von Fintel 2004 on "Hey, wait a minute").

Illustrating At-issueness

- That meanings which do not project are at-issue, is illustrated by the felicity of the dialogues in which ordinary content (10) and conversational implicatures (11) are targeted by affirmations.

Examples

(10) PROFFERED CONTENT:
A. Fred ate a lot tonight.
B. You're right, he did eat a lot.

(11) CONVERSATIONAL IMPLICATURE:
A. You wanna know if Fred should be a neurosurgeon? Well, he's punctual and always cheerful.
B. You're right, he'd suck.

Not-at-issueness of standard presuppositions

- Inferences that are known to project cannot be targeted felicitously by a "you're right" affirmation, and hence are not at-issue.

Examples

(12) DEFINITE:
A. The King of France will be at the exhibition.
B. You're right, he will be.
B'. # You're right, there is a King of France.

(13) FACTIVE:
A. Fred doesn't know his wife is cheating on him.
B. You're right, he has no idea.
B'. # You're right, she is cheating on him.

Not-at-issueness of other projective meanings

Examples

(14) APPOSITIVE:
A. Fred, a friend of John's, is here.
B. You're right, he is here.
B'.# You're right, he is a friend of John's.

(15) APPROXIMATIVE:
A. Gore almost won.
B. You're right, he came close.
B'. # You're right, he lost.

Explaining Projection

- This leads us to hypothesize a simple explanation of projection.
  1. Not at-issue material projects because the embedding constructions used in projection tests (e.g. negation) comment on whatever is under discussion, and hence target at-issue components of meaning.
  2. Not at-issue components are not modified by the embedding construction.
  3. So not at-issue components project.
- Note that neither the generalization nor the explanation are clearly stated in prior literature, although they have commonalities with proposals in Abbott (2000) and Simons (2004).

An advantage of the account: the effect of context on projection

- It is important that at-issueness is a pragmatic, context dependent property.
- We can force a particular entailment into at-issue status by manipulating the discourse environment and/or intonational realization
- And it is precisely when the environment has this effect that projection is suppressed.

Manipulating context

- In (16), existence of a French king is explicitly given at-issue status using a question.
- In such a context, the standard presupposition, that there is a French king, does not project, as seen in (17).

Examples

(16) A. Does France have a king?
B. How can you ask that? The king of France was at the exhibition!
C. She's right, there is a king of France.

(17) A. Does France have a king?
B. The king of France wasn't at the exhibition.
$\neq$ *There is a king of France who was not at the exhibition.*

Effect of intonation on projection

- In (18), focus determines whether what is at issue is the identify of the person who ran quickly (a), or the manner/speed of running (b).
- Our proposal correctly predicts that in cases like (18) b, the proposition that John ran projects over the negation.
- Note here that failing this, manner adverbials would have to be given a more general presuppositional requirement (as Abbott 2000), but (i) this would be stipulative, and (ii) it wouldn't explain absence of projection in (18) a.

Examples

(18) a. JOHN didn't run quickly.
b. John didn't run QUICKLY.

Conclusions

- Projective meanings have not been treated uniformly, but we've presented evidence of commonalities among projective meanings, beyond projection itself.
- Specifically, projective aspects of meaning are *not at issue*.
- Prior models of projection, as well as having problems within their original domains of application, do not extend to the full class of projective meanings.
- We have proposed that not-at-issueness can *explain* projection.
- So a precise account cannot be stated purely in terms of compositional derivation of projective components of meaning.
- What is needed is a dynamic model of discourse which determines at every point in a discourse not only what has been established, but what is at issue.