What projects and why

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Projection

• Projection
  Semantic content \textit{projects} if it contributes content at a global level in spite of being embedded under one or more operators that might be expected to block inferences from expressions in their scope.

• Proposal (informally stated):
  Semantic content projects when it is \textbf{not at-issue} in the discourse context since operators target at-issue meaning.
Presuppositions project

Guaraní (Paraguay, Tupí-Guaraní)

(1) Maléna o-heja la jepita.
   Malena 3-stop the smoke
   ‘Malena stopped smoking.’

(2) Maléna nd-o-hejá-i la jepita.
   Malena NEG-3-stop-NEG the smoke
   ‘Malena didn’t stop smoking.’

(3) I-katu Maléna o-heja la jepita.
   3-possible Malena 3-stop the smoke
   ‘It’s possible that Malena stopped smoking.’

Imply: Malena smoked.
Do not imply: Malena is not smoking anymore.

At least the following project:

• Definites
• Factive verbs and nouns
• Telic and implicative verbs
• Aspectual adverbs
• Sortally restricted adjectives
• Clefts
• Intonational backgrounding
• ...
Not all that projects is a presupposition

**Non-restrictive relative clauses**

(4) Maléna, ha’é-va Juan angiru, o-ho Caaguasú-pe.

Malena 3.pron-RC Juan friend 3-go Caagasu-to

‘Malena, who is Juan’s friend, went to Caaguasu.’

(5) Maléna, ha’é-va Juan angiru, nd-o-hó-i Caaguasú-pe.

Malena 3.pron-RC Juan friend NEG-3-go-NEG Caagasu-to

‘Malena, who is Juan’s friend, did not go to Caaguasu.’

Imply: Malena is Juan’s friend.

Cf. Chierchia & McConnell-Ginet (1990); also Beaver (2001) on parentheticals

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**Potts (2005): Conventional implicatures project**

(6) **Politeness morphemes**

Falls Sie hungrig sind, wird mein Sohn das Essen servieren.

‘If you (formal) are hungry, my son will serve the food.’

Implies: speaker in deferential position wrt addressee

(7) **Appositives**

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

Implies: Patrick is a big drinker.

(8) **Expressives**

If that son-of-a-bitch Patrick left, he’d better not have taken the flower arrangement.

Implies: Speaker has negative attitude towards Patrick.
Common ground approaches to projection

- One of the best known explanations of projection (Stalnaker 1973, 1974; Karttunen 1974; Lewis 1979; Heim 1983)
- Idea: Presuppositions involve constraints on the common ground, i.e. project to be globally satisfied.

(9) Nde-kaigué-ramo, e-ke che-kyhá-pe.
    2sg-feel.lazy-if IMP.2sg-sleep 1sg-hammock-in
    'If you feel lazy, sleep in my hammock.'

Problems with CG approaches to projection

1. Not clear that all commonly recognized presupposition triggers are consistently associated with common ground requirements.
   E.g.: Is p in I know that p required to be in the common ground? (Simons 2007)
2. There is no empirical support for extending the approach to the full range of projective meanings.
   E.g.: The content of appositives is canonically intended as new information to the addressee.

(10) Bob is a sledder. #Bob, a sledder, participated in the 2010 Winter Olympic Games.
Problems with CG approaches to projection

3. Generalizing the common ground approach to the full range of triggers of projective meanings raises serious problems for accommodation.

(9) Nde-kaigué-ramo, e-ke che-kyhá-pe.
2sg-feel.lazy-if IMP.2sg-sleep 1sg-hammock-in
‘If you feel lazy, sleep in my hammock.’

• For some triggers, e.g. Potts’ CIs, accommodation would occur on nearly all occasions of use.

• Accommodation would then not be a rescue strategy, triggered by an apparent violation, but become the norm.

• The idea of a prior common ground constraint would become essentially vacuous.

Problems with CG approaches to projection

4. The CG approach is clearly appropriate for anaphors (e.g. too, pronouns): require that salience/familiarity of the antecedent is in the common ground.

(11) If she didn’t sleep in the hammock, I don’t know where she slept.

• The common ground requirement of anaphors is well-known to resist accommodation.

• If in the paradigm case of a common ground constraint accommodation is generally ruled out, a theory in which accommodation of common ground constraints is the norm is problematic.
Anaphoric approaches to projection

- Presuppositions are a type of anaphor (van der Sandt 1992, Geurts 1999)
- The identification of an antecedent produces the effect of projection.
- Problems:
  1. Unnatural to extend to other projective meanings that do not carry anaphoric requirements (e.g. appositives, expressives); see also (10).
  2. Accommodation, the strategy by which an anaphoric antecedent is provided, is not available for anaphors, the paradigm case.

Multi-component accounts of projection

- Karttunen (1979) and Potts (2005) divide meanings into independent components (or dimensions).

(12) [Patrick, the son-of-a-bitch, owes me a drink]

= < (owes (me, patrick, drink), sob(patrick)> 

- Problems:
  1. Semantic dependence between ordinary content and CIs (Amaral, Roberts & Smith 2008)
  2. Independence is not a general explanation of projection since presuppositions project but also interact with with ordinary content.
Observations in the literature

- “Presuppositions ... are something like the **background beliefs** of the speaker -- propositions whose truth he takes for granted, or seems to take for granted, in making his statement.” (Stalnaker 1974: 198)

- “...a presupposition is a proposition that is conveyed by a sentence or utterance but is **not part of the main point**...” (Horton & Hirst 1988: 255)

Observations in the literature

- “To presuppose something is to **take it for granted in a way that contrasts with asserting it**.” (Soames 1989: 553)

- “([A]n utterance of) a sentence S presupposes a proposition p if (the utterance of) S implies p and further implies that p is somehow already part of the background against which S is considered, that **considering S at all involves taking p for granted**.” (Chierchia & McConnell-Ginet 1990: 280)
Observations in the literature

• “...what is asserted is what is presented as the main point of the utterance --- what the speaker is going on record as contributing to the discourse. [...] Anything else will have to be expressed in another way, typically by being presupposed.” (Abbott 2000: 1431f.)

• The content of appositives and expressives is not at-issue (‘what is said’) (Potts to appear).

Not-at-issueness as a property of projective meanings

Hypotheses:

All and only those implications of (embedded) S which are not-at-issue relative to the Question Under Discussion in the context (QUĐ) have the potential to project.

Operators (modals, negation, etc.) target at-issue content.
Question under Discussion: Definition

[Roberts 1996/1998]

- Formal definition within Roberts’ framework
- Basic idea: QUD is what fixes the current discourse topic and thereby imposes relevance constraints on subsequent discourse contribution(s).
- Once a question is under discussion, it remains so until it has been answered or determined to be practically unanswerable (resolved).
  - Address a QUD: to make a discourse move that contributes to resolution of the QUD.

At-issueness: preliminary discussion

First pass

- Proposition $p$ is **at-issue** iff the question whether $p$ ($?p$) is relevant to the QUD.
- $?p$ is **relevant to QUD** iff it has an answer which **contextually entails a (partial or complete) answer to the QUD**. (Roberts 1996)
- Difficulty:
  - In some cases, multiple propositions will have property 1:
    (13) **Q:** Where’s Bob?
    **A:** Bob, who is having lunch with someone else, is not here.
  - We resolve this difficulty by invoking speaker intention.
At-issueness: definition

1. A proposition $p$ is at-issue iff the speaker intends to address the QUD via $?p$.
2. An intention to address the QUD via $?p$ is felicitous only if:
   - $?p$ is relevant to QUD (i.e. contextually entails an answer)
   - the speaker can reasonably expect the addressee to recognize this intention

- Speaker intention is what determines at-issue status; but the relevance constraint limits these intentions.
  - Presume there are additional linguistic cues

Example: at-issueness & projection

(14) [Background scenario: a nutritionist has been visiting first grade classrooms to talk to the children about healthy eating.]

Q: What most surprised you about the first graders?
A: They didn’t know that you can eat raw vegetables.

- The question: which implications of the negated proposition they knew that you can eat raw vegetables are (not)-at-issue?
- Reminder: we are looking at implications of the proposition under negation, because the goal is to identify those which are candidates for projection.
- We examine only two of the candidate propositions.
Example: at-issueness & projection

(14’) Q: What most surprised you about the first graders?
   A: They didn’t know that you can eat raw vegetables.

- **Implication 1: you can eat raw vegetables** [p]
- ?p [question whether p] has no answer which contextually entails an answer to QUD Q.
- So ?p is not relevant to QUD.
- Hence speaker cannot felicitously intend to address QUD via ?p.
- Hence p is not-at-issue, and (by hypothesis) can project.

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Example: at-issueness & projection

(14’) Q: What most surprised you about the first graders?
   A: They didn’t know that you can eat raw vegetables.

- **Implication 2: They knew that you can eat raw vegetables**
- The question of whether the knowledge claim is true has an answer (i.e. the assertion) which contextually entails an answer to QUD.
- Hence this question is relevant to QUD.
- Presume it is intended to address the QUD, hence is at-issue.
- Hence, it is targeted by negation.
Explanatory force of the hypothesis:
Projected material is not-at-issue

- Standard observation from the literature, as reviewed earlier.
- Projective material typically infelicitous as answer to question

(16) A: Where’s Bob these days?
   B: # Bob, who is in Austin, hasn’t called me for a week.
   B’: Bob, who called me yesterday, is in Austin.

(17) A: What do you think of Bob?
    B: # That SOB Bob is dating my sister.

Explanatory force of the hypothesis:
Projected material is not-at-issue

- Projective meanings are transparent to simple affirmations and denials.

(19) A: Bradley might have gone to the airport to pick up his sister.
    B: Yes. / That’s right.
    B’: No. / That’s not true.
- Affirmation/denial targets claim that Bradley might have gone to the airport, not claim that he has a sister.
Explanatory force of the proposal: Suppressing projection

**Definites**

(20) **Q1:** Which monarchs attended the Polish president’s funeral?  
    **A1:** The king of France wasn’t there.  
    • ≈ Implied presumption that there is a KoF, assertion that he wasn’t there.

(21) **Q2:** Does France have a king?  
    **A2:** The king of France wasn’t at the funeral.  
    • ≈ “It’s not the case that there is a KoF who was at the funeral” (so probably/perhaps there is no KoF)

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Explanatory force of the proposal: Suppressing projection

**know**

(22) **Q1:** What does Bill think about Harry dating Sally?  
    **A1:** He doesn’t know that Harry is dating Sally.  
    • Implied presumption that Harry is dating Sally, assertion that Bill doesn’t know it.

(23) **Q2:** Is Harry dating Sally?  
    **A2:** Bill doesn’t know that he is.  
    • ≈ “It’s not the case that Bill knows that he is” (so probably/perhaps he isn’t)
Explanatory force of the proposal: Supressing projection

*win*

(24) Q1: How do you think Bill will do in the election?
   A1: He won’t win.
   • Implied presumption that Bill will run, asserts he won’t run.

(25) Q2: Will Bill run in the election?
   A1: He won’t win.
   • ≈ “If he runs, he won’t win.”

Explanatory force of the proposal: Supressing projection

*bachelor*

(26) Q1: Is your new neighbor going to join the singles club?
   A: My new neighbor isn’t a bachelor.
   • Implied presumption that neighbor is male, assertion that he’s not single/eligible.

(27) A: My new neighbor is very mysterious. I know someone’s moved in, but I have hadn’t a glimpse of anyone yet.
   Q2: Have you figured out anything at all about them?
   A: Well, it’s not a bachelor for sure. Someone’s been hanging curtains.
   • No gender implication.
Explanatory force of the proposal: Suppressing projection

• Summary
  – Our proposal predicts that when typically projective material (e.g. “standard presuppositions”) is made at-issue in the discourse, it will fail to project.
  – Examples illustrate that this prediction is borne out.

When status can’t be manipulated

• In the examples given, the at-issue status of propositions can be manipulated by manipulating the discourse context.
• Some cases of projective content don’t allow such manipulation. It is plausible that in these cases, the (not)-at-issue status is obligatorily associated with the lexical item or syntactic construction used.

(28) Q: Where’s my coat?
   A: I’ve always liked that coat, which is on the floor.
Explanatory force of the proposal: Focus & projection

- Long-standing observation that non-focused material projects, focused material “associates” with operators.

(29) Paula isn’t registered in \([\text{Paris}]_f\)
- Roughly: It is not in Paris that Paula is registered.

(30) \([\text{Paula}]_f\) isn’t registered in Paris.
- Roughly: It is not Paula who is registered in Paris.
  - Kratzer 1989

Explanatory force of the proposal: Focus & projection

- Others have proposed special purpose rules for explaining projection of intonationally backgrounded material (e.g. Geurts and van der Sandt 2004)
- For us, the generalization falls out from two independent claims:
  - Focus marks what question is under discussion (cf. Rooth 1992 etc.), hence what part of what is uttered is at-issue.
    - intonationally backgrounded material is typically not-at-issue
  - What is not-at-issue projects.

- We leave the details for another occasion.
Closing remarks

- **Our goal:** a unified account of projection for all instances of projective content.

- **Our proposal:** this account will make crucial reference to the discourse role of elements of content, which we characterize in the current proposal in terms of at-issueness.