

Overview

- Karttunen 1969 looked at what introduces (individual) discourse referents—things that can be referred to by e.g. pronouns
- Here I do the same for **propositional discourse referents** (pdrefs)
- I look at two existing approaches (syntactic and discursive) and challenge both
- I argue that we must look to the semantics: operators which take propositional arguments introduce pdrefs for those arguments

Introduction

Karttunen 1969 showed not all NPs introduce drefs.

- (1) # Lucy doesn't have a car. *It* is blue.

He concluded that NPs introduce drefs in sentences whose propositional content is “asserted, implied or presupposed by the speaker to be true”. Krifka 2013 showed that the same can't be true for pdrefs.

- (2) Lucy doesn't have a car, even though she tells people *that*. (cf. Krifka 2013:(24))

So what does(n't) introduce pdrefs?

There are two existing accounts worth evaluating.

Approach 1: Syntactic: TP+

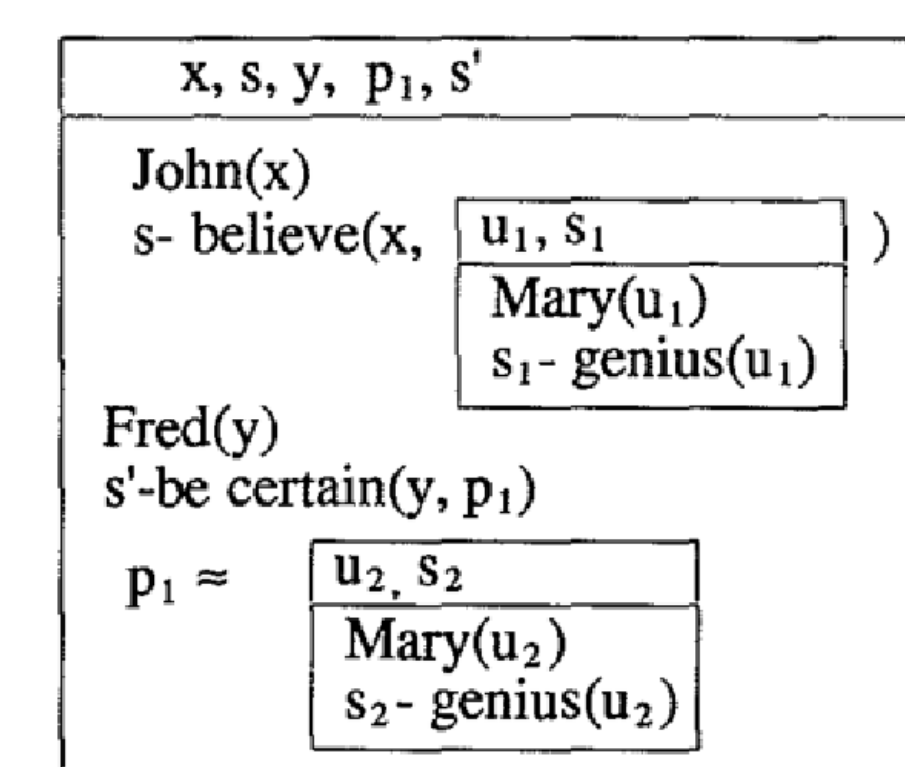
Krifka 2013 argues that TP (and higher projections like NegP) introduces a pdref for its content.

[_{ActP} ASSERT [_{NegP} Ede did-n't [_{TP} t_{Ede} t_{did} [_{VP} t_{Ede} t_{steal} steal the cookie]]]]
 ↪_{speech act} ↪_{d'prop} ↪_{d'prop} ↪_{d''event}

This makes strong testable predictions.

Approach 2: Discursive: EDU

Others identify pdref introduction with (sub)DRSs or *elementary discourse units* (EDUs) from recent work on discourse relations & structure (Asher 1993; Carlson and Marcu 2001; Asher et al. 2012; Hunter and Asher 2016; Asher et al. 2017).



These can be tricky to identify, but there are guidelines in place, so the approach is testable.

(Asher 1993:242)

Subclausal: Small Clauses

Predictions:

TP+ Small clauses don't introduce pdrefs (sub-TP)

EDU Unclear, unless SCs are 'clausal complements'

Most types of SCs behave as predicted (no pdref):

- (3) # Lucy wanted her steak rare, but *that's* not true. (It's medium.) SEC. PRED.
 (4) # Lucy made Charlie angry, but *that's* not true. (He's happy.) CAUSATIVE
 (5) # The rabbi pronounced them married, but *that's* not true. (They're single.) RESULT

But epistemic small clauses do introduce pdrefs:

- ! (6) The rabbi considered them married, but *that's* not true. (They're not.) EPISTEMIC

For **TP+**, the SC syntax in (5)&(6) must differ. (This is possible, if epistemics are covert infinitives.)

Subclausal: NP Adverbs

Predictions:

TP+ Only TP+ adverbs introduce pdrefs (not NPs)

EDU Only elliptical or temporal adverbs are EDUs

Most NP adverbs don't introduce pdrefs; even the agent-oriented *surprisingly* in (8) doesn't introduce a pdref for 'the box was heavy' (subj/spkr anchor):

- (7) # Lucy lifted a fairly heavy box, but I don't believe *that*. DEGREE
 (8) # Lucy lifted a surprisingly heavy box, but I don't believe *that*. EVALUATIVE

But an epistemic adverb does introduce that pdref:

- ! (9) Lucy lifted a supposedly heavy box, but I don't believe *that*. EPISTEMIC

For **TP+**, *heavy box* in (9) would have to be its own TP (as speaker believes it was supposedly heavy).

Generalization

It is not specific structures which determine whether a pdref is introduced (contra both **TP+** and **EDU**), nor their status in discourse (Snider 2017), but the things which embed them.

If sentential mood 'embeds' the matrix proposition (Bittner 2011), this extends to matrix clauses.

Operators which take propositional arguments introduce discourse referents for those arguments. (DECL, NEG, certain verbs...)

This captures a wide range of data, including subclausal, monoclausal, multiclausal, and multisentential constructions across declarative, interrogative, and imperative sentences (see Snider 2017).

Implementation

This characterization of proposition-taking operators can be modeled in a Bittner-style Update with Modal Centering system.

DECL \rightsquigarrow [$\perp \omega \in \top \omega$]; [$\top \omega = \perp \omega$]; \top [$p|p = \top \omega$]

Following Murray 2014, the declarative mood triggers a proposal to update, an update, and then introduces a pdref for the new context set (into \top -list).

NEG \rightsquigarrow [$p|p = \perp \omega$]; [$w|w \notin p$]

Sentential negation introduces a pdref for its pre-jacent (into \perp -list) and then adds the complement of the pre-jacent-worlds. Embedding verbs are similar.

For sentences like (2)—DECL(NEG(φ))—NEG adds a \perp -pdref for φ and DECL adds a \top -pdref for $\neg\varphi$.

Selected References

Asher 1993. Reference to abstract objects in English ♦ Asher et al. 2012. Manual for the analysis of settlers data. ♦ Asher et al. 2017. ANNODIS and related projects: Case studies on the annotation of discourse structure. ♦ Bittner 2011. Time and modality without tenses or modals. ♦ Carlson & Marcu 2001. Discourse tagging reference manual. ♦ Hunter & Asher 2016. Shapes of conversation and at-issue content. ♦ Karttunen 1969. Discourse referents. ♦ Krifka 2013. Response particles as propositional anaphors. ♦ Murray 2014. Varieties of update. ♦ Snider 2017. Anaphoric reference to propositions.

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Interim Observation

At least some sub-TP/sub-EDU material has an associated pdref.

Multiclausal: Raising & Control Constructions

Predictions:

TP+ All infinitive complements should introduce pdrefs (whether analyzed as TP or CP): All of the below

EDU Only non-infinitive complements of attribution or cognitive predicates are EDUs: None of the below

All subject raising constructions introduce pdrefs (contra **EDU**); no object control constructs do (contra **TP+**)

- (10) Lucy seemed to be at the party, but *that* wasn't true. (She was home.) SUBJ RAISING
 (11) # Patty asked Lucy to be at the party, but Linus didn't believe *that*. (He thought she would stay home.) OBJ CONTROL

But object raising & subject control constructions *sometimes* introduce a pdref for the infinitive complements.

- ! (12) Patty expected Lucy to be at the party, but Linus didn't believe *that*. (He thought she would stay home.) OBJ RAISING
 ! (13) # Patty wanted Lucy to be at the party, but Linus didn't believe *that*. (He thought she would stay home.) OBJ RAISING
 ! (14) Lucy claimed to be at the party, but *that* wasn't true. (She was home.) SUBJ CONTROL
 ! (15) # Lucy tried to be at the party, but *that* wasn't true. (She was home.) SUBJ CONTROL

Complements of the epistemic embedding verbs *expect* and *claim* get pdrefs; not so for *want* or *try*.

This is not expected under either **TP+** or **EDU**, nor can either easily be tweaked to account for this data.

Crucial Observation

Whether a construction introduces a pdref depends on not just the embedded structure, but its embedder.