

## 1 Introduction

- (1) Speaker-orientation: a clause  $C$  with denotation  $p$  is *speaker-oriented* in utterance  $U$  if, and only if, in uttering  $U$ , the speaker expresses, with  $C$ , a public commitment to  $p$ .

**Central questions** Wang, Reese & McCready (2005), Karttunen & Zaenen (2005), and Amaral, Roberts & Smith (2007) (ARS) present convincing evidence that appositives and expressives can be non-speaker-oriented when uttered (see also Potts 2005:162, Potts 2007). We seek to answer the following more specific questions about the semantics and pragmatics of these constructions:

- i. How widespread are non-speaker-oriented readings of appositives and expressives?
- ii. What are the underlying linguistic factors that make such readings available?

### Outline

- §2 Non-speaker-oriented readings in the literature.  
 §3 *Experiment 1*: Appositives, syntactically embedded and unembedded, in perspectival rich discourses.  
 §4 *Experiment 2*: Expressives, syntactically unembedded, in perspectival rich discourses.  
 §5 *Corpus work*: Syntactically embedded appositives, textual evidence, and speaker intentions.

### General findings

- Non-speaker-oriented readings, while rare in actual language use, are systematic.
- Non-speaker-oriented readings occur even outside of attitude predications, which leads us to favor an account based in pragmatically-mediated perspective shifting over one that relies on semantic binding by attitude predicates.

The results challenge Potts’s (2005) naïve view of speaker-orientation, but they are consistent with the multidimensional theory of composition he develops.

**Empirical focus** Nominal appositives (2a), appositive relatives (2b), and nominal epithets (2c).

- (2) a. Lucille Gorman, an 84-year-old Chicago housewife, has become amazingly immune to stock-market jolts. [Treebank]  
 b. uh, she starts a new job tomorrow, which should take her out of the house about four days a week. [Switchboard]  
 c. In traffic so heavy that there is no way for the jerk to pass, I might pull over, as if to look for a street number or name, (still ignoring the jerk) just to get the jerk off my tail. [20\_newsgroups]

## 2 Appositives, expressives, and (non-)speaker orientation

### 2.1 Apparent cases of exceptional scope

We take it as uncontroversial that appositives and expressives can, and often do, scope out of presupposition hole and plug environments, including tense — scope out in the sense that they can be embedded below such operators without becoming part of their semantic arguments. The associated paper provides a lot of new empirical data supporting this basic claim.

### 2.2 Apparent narrow scope

- (3) [From a jaunty article about Alfred Kinsey, the biologist who founded the Institute for Research in Sex, Gender and Reproduction:]

Far out on the grassy knoll of sexology, there is a cult of procastity researchers who claim that the late Alfred Kinsey was a secret sex criminal, a Hoosier Dr. Mengele, who bent his numbers toward the bisexual and the bizarre in a grand conspiracy to queer the nation and usher in an era of free sex with kids. [20\_newsgroups corpus]

- (4) Joan is crazy. She’s hallucinating that some geniuses in Silicon Valley have invented a new brain chip that’s been installed in her left temporal lobe and permits her to speak any of a number of languages she’s never studied. Joan believes that her chip, which was installed last month, has a twelve year guarantee. (ARS)

- (5) [Context: We know that Bob loves to do yard work and is very proud of his lawn, but also that he has a son Monty who hates to do yard chores. So Bob could say (perhaps in response to his partner’s suggestion that Monty be asked to mow the lawn while he is away on business):]

Well, in fact Monty said to me this very morning that he hates to mow the friggin lawn. (ARS)

### 2.3 Hypotheses

**Configurational** The source of non-speaker-oriented readings of appositives and expressives is semantic binding: their content can be bound by higher operators like attitude predicates, thereby shifting it away from the speaker (Schlenker 2003:98; Schlenker 2007:§4; Sauerland 2007).

**Contextual** The source of non-speaker-oriented readings of appositives and expressives is the interaction of a variety of pragmatic factors. In general, these interactions favor speaker-orientation, but other orientations are always in principle available, regardless of syntactic configuration (Potts 2007).

### 2.4 Expressive shifting without embedding

- (6) I was struck by the willingness of almost everybody in the room — the senators as eagerly as the witnesses — to exchange their civil liberties for an illusory state of perfect security. They seemed to think that democracy was just a fancy word for corporate capitalism, and that the society would be a lot better off if it stopped its futile and unremunerative dithering about constitutional rights. Why humor people, especially poor people, by listening to their idiotic theories of social justice? [Lewis Lapham, Harper’s Magazine, July 1995]

## 3 Experiment 1: Appositives and embedding

We haven’t found examples comparable to (6) involving appositives, but our intuitions suggest that they are possible. Experiment 1 confirms these intuitions, thereby further supporting the **contextual hypothesis** over the **configurational hypothesis**.

### 3.1 Materials, method, and participants

Invariant, perspectival rich context and a target sentence containing an appositive:

**Context:** I am increasingly worried about my roommate. She seems to be growing paranoid.

A. The other day, she told me that we need to watch out for the mailman, a possible government spy.

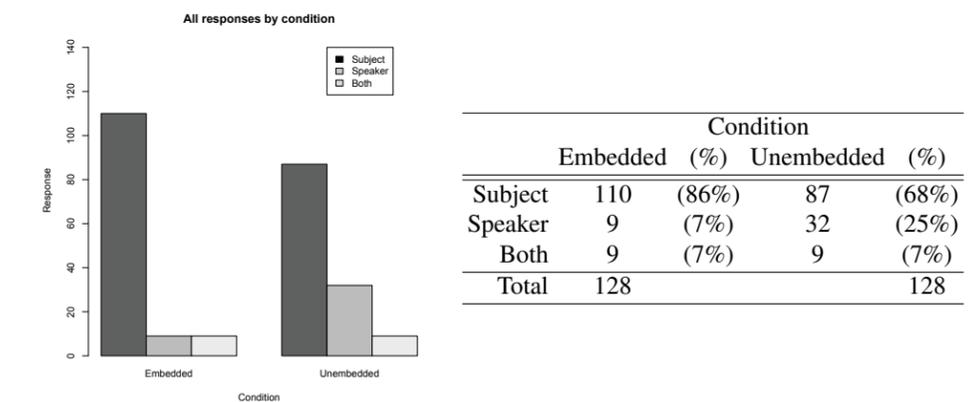
B. The other day, she refused to talk with the mailman, a possible government spy.

Whose view is it that the mailman might be a government spy?

- a. Mine (Speaker)
- b. My roommate’s (Subject)
- c. Mine & my roommate’s (Both)

Two balanced lists across four questionnaires, eight pairs in all, randomly interspersed with items from two other subexperiments (including 16 items from experiment 2) and four genuine fillers, for a total of 40 items per questionnaire. Thirty-one students from UMass Amherst participated in the study online.

### 3.2 Data analysis: Distribution of responses



### 3.3 Data analysis: The influence of syntactic position

Non-speaker-oriented readings were strongly favored in both the Embedded and Unembedded conditions, but they arose more often in Embedded conditions. Is this difference significant? We combined the Speaker and Both responses into a single Non-Subject category and subjected the data to regression analysis. The fitted logit model is

$$\Pr(\text{Subject}) = \text{logit}^{-1}(0.75 + 1.06x)$$

where  $x = 1$  for the Embedded condition and 0 for the Unembedded condition. The estimated coefficient for Embedded is 1.06 with a standard error of 0.32. The coefficient is thus more than three standard errors from 0.  $p < 0.001$ .

### 3.4 Discussion

Experiment 1 supports three central conclusions:

- Non-speaker-oriented readings are available for appositives, both when they are syntactically embedded inside attitude predications and when they are in matrix clauses.
- In perspectively-rich contexts, non-speaker-oriented readings are even preferred under some circumstances.
- Embedding inside an attitude context significantly increases the likelihood of a non-speaker-oriented reading.

## 4 Experiment 2: Epithets and perspective shift

**Context hypothesis** If participants are given evidence that the subject of the attitude report holds a negative emotive stance towards the referent of an epithet, they will more often interpret that epithet as non-speaker-oriented later in the discourse. Conversely, if they are not given such biasing evidence, then they will more often favor speaker-orientation, which is arguably the default strategy.

**Intensives** We further hypothesized that the stronger the evidence for an emotional relationship between the subject and referent of the epithet, the stronger the inferences required for perspective shift would be. We sought to strengthen this evidence by using intensives like *really*, *totally*, and *super*.

### 4.1 Materials and method

The design crossed two factors: the polarity of Context (Negative, Positive) with the presence of an Intensifier (Y, N). The experimental items consisted of sixteen quadruplets, with the same pattern as the following sample item. Each varied only in whether the context was positive or negative and whether there was an intensifier before the adjective or not. The study involved the same thirty-two participants from experiment 1.

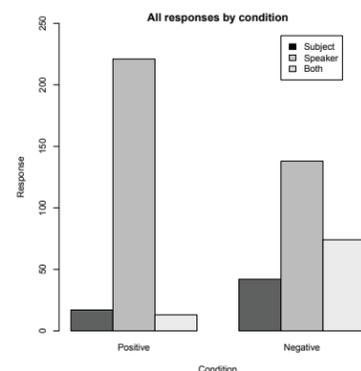
Suppose you and I are talking and I say:

- My classmate Sheila said that her history professor gave her a low grade. (Negative, N)
- My classmate Sheila said that her history professor gave her a really low grade. (Negative, Y)
- My classmate Sheila said that her history professor gave her a high grade. (Positive, N)
- My classmate Sheila said that her history professor gave her a really high grade. (Positive, Y)

Whose view is it that the professor is a jerk?

- Mine (Speaker)
- Sheila's (Subject)
- Mine and Sheila's (Both)

### 4.2 Data analysis: The distribution of responses



	Context			
	Pos	(%)	Neg	(%)
Subject	17	(7%)	42	(17%)
Speaker	221	(88%)	138	(54%)
Both	13	(5%)	74	(29%)
Total	251		254	

A typo affecting the first nine participants in one item was found. Responses for this item were coded as “NA” and removed from further analysis.

**The Intensifier condition** This was not a significant predictor of how an epithet was interpreted. This was confirmed by fitting the data to a logit model; neither the Intensifier condition nor its interaction with the Context condition had a significant coefficient. If they contributed at all, it was in an unexpected direction. For this reason, we henceforth leave the Intensifier condition out of our models.

### 4.3 Data analysis: The influence of context

To what extent does the nature of the context (Positive or Negative) predict Subject readings? We again grouped Speaker and Both responses into a single Non-Subject category and built a logit model predicting the probability of non-speaker-oriented readings based on Context. The fitted model is

$$\text{Pr}(\text{Subject}) = \text{logit}^{-1}(-2.62 + 1.00x)$$

where  $x = 1$  if the context is Negative and  $x = 0$  if it is Positive. The coefficient for the Positive predictor is more than three standard errors from 0;  $p < 0.001$ .

### 4.4 Discussion

The results of experiment 2 further support the claim that non-speaker-oriented readings are possible for expressives, if the right contextual factors are present. The results also suggest that such readings do not require syntactic embedding, and thus they further **challenge the configurational hypothesis**.

## 5 Corpus study

How frequent are non-speaker-oriented readings in naturally occurring text? We address this question with a new corpus of embedded appositives (Potts & Harris 2009).

### 5.1 Data and methods

We began with 177 million words of novels, newspaper articles, and TV transcripts. With a simple regular expression search, we found 278 examples of appositives syntactically embedded inside the complements to attitude verbs. We went through these examples by hand, developing, where possible, *textual* arguments for what the intended appositive interpretation was: text-level or embedded. We were able to construct such arguments for 62 of the examples: 5 for embedded, 57 for text-level. Our arguments were then evaluated by two independent annotators. They answered two questions for each example: (i) What kind of reading is this evidence for? (Text, Embedded, Unclear); and (ii) What is the status of the textual argument? (Good, Bad).

### 5.2 Analysis

		Good			Bad		
		Text	Embedded	Unclear	Text	Embedded	Unclear
Good	Text	32	0	0	11	0	2
	Embedded	0	5	0	0	2	0
	Unclear	0	0	0	0	0	0
Bad	Text	10	1	0	11	0	1
	Embedded	0	3	0	1	4	0
	Unclear	0	0	1	1	1	0

- For the whole table, the kappa measure of agreement for our two independent annotators is 39% (moderate agreement).
- For the subset of examples for which both assessors regarded the argument as Good (upper left quadrant), the kappa measure is 100%.

### 5.3 Discussion

**Risky strategies** A speaker who utters an appositive with the intention of having it be understood as non-speaker-oriented has undertaken a risky communicative strategy in the following sense: it runs counter to hearer expectations about how these constructions will be used.

**Underspecification** We think this imbalance has an underlying theoretical cause. Suppose appositives and expressives are inherently underspecified for their orientation. Since there is no general morphological convention for specifying this information directly, it must always be left to the context.

**Potential source for a default** Appositives have many of the morphosyntactic and intonational properties of regular asserted declaratives, which are also overwhelmingly speaker-oriented, so perhaps it is unsurprising that appositives are generally speaker-oriented as well.

## 6 Conclusion

Potts (2005:1) writes, “I hope readers of this book are struck by how little pragmatics it contains”. ARS take him to task for this, arguing that the important questions about appositives and expressives are largely pragmatic. At this point, we are inclined to agree; a unifying theme of the experimental and corpus work described here is that the important, challenging interpretive questions about appositives and expressives concern where and how they are used.

## References

- Amaral, Patricia, Craig Roberts & E. Allyn Smith. 2007. Review of *The Logic of Conventional Implicatures* by Chris Potts. *Linguistics and Philosophy* 30(6): 707–749.
- Karttunen, Lauri & Annie Zaenen. 2005. Veridicity. In Graham Katz, James Pustejovsky & Frank Schilder (eds.) *Annotating, Extracting and Reasoning about Time and Events*. No. 05151 in Dagstuhl Seminar Proceedings, Dagstuhl, Germany: Internationales Begegnungs- und Forschungszentrum für Informatik (IBFI), Schloss Dagstuhl, Germany. URL <http://drops.dagstuhl.de/opus/volltexte/2005/314>.
- Potts, Christopher. 2005. *The Logic of Conventional Implicatures*. Oxford Studies in Theoretical Linguistics, Oxford: Oxford University Press.
- Potts, Christopher. 2007. The expressive dimension. *Theoretical Linguistics* 33(2): 165–197.
- Potts, Christopher & Jesse Aron Harris. 2009. Embedded appositives (annotated data). URL <http://people.umass.edu/potts/data/embeddedappositives/>.
- Sauerland, Uli. 2007. Beyond unpluggability. *Theoretical Linguistics* 33(2): 231–236.
- Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26(1): 29–120.
- Schlenker, Philippe. 2007. Expressive presuppositions. *Theoretical Linguistics* 33(2): 237–245.
- Wang, Linton, Brian Reese & Eric McCready. 2005. The projection problem of nominal appositives. *Snippets* 10: 13–14.