

The Locus of Commitment

Flipping Judges in a Commitment-Based Discourse Model

John Duff

UC Santa Cruz
jduff@ucsc.edu

Abstract. This paper examines the interpretation of context-dependent expressions, specifically predicates of personal taste, in declarative and interrogative discourse moves, focusing on patterns of speaker- and addressee-dependence rather than standard questions of embedding and perspective shift. I argue that these patterns reflect a connection between the Lasersohnian (2005) JUDGE and the notion of COMMITMENT used in commitment-based models of discourse (Gunlogson, 2001; Farkas & Bruce, 2010; Farkas & Roelofsen, 2017). I demonstrate that adopting this connection allows us to generalize correctly beyond the simple observation of interrogative flip, to the behavior of judge-dependence in presuppositions and their accommodation, appositives, and marked discourse moves like rising declaratives and tag questions.

Keywords: Contextual dependence · Discourse models · Perspective

1 Introduction

A large selection of constructions proposed to be context-dependent appear to involve as an index or optionally implicit argument some mentally-active agent who contributes a source of evaluation, experience, or expressivity. This selection includes predicates of personal taste (PPTs) (Lasersohn, 2005; Stephenson, 2007; Bylinina, 2017)¹; epithets (Harris & Potts, 2009); modal constructions (Kratzer, 1981); and evidential constructions (Aikhenvald, 2004). I'll refer to the agent who explicitly or implicitly fills this role as the JUDGE (Lasersohn, 2005).

Recent work has examined this class under the banner of PERSPECTIVE, and the instances wherein a non-speaker judge obtains as PERSPECTIVE SHIFT (Harris, 2012; Bylinina et al., 2014, i.a.). Earlier accounts proposed sole speaker-dependence (Potts, 2007, e.g.) or operator-induced shifting (Schlenker, 2007; McCready, 2006, e.g.), a la indexical shift (Schlenker, 2003). Recent approaches have argued for pragmatic control of the judge, based on evidence that such shifting is available outside of embedding and licensed by a variety of pragmatic considerations (Amaral et al., 2007; Harris & Potts, 2009; Korotkova, 2018).

In this paper, a different approach will be taken, focusing not on embedding, or exocentric (i.e. third-party, neither speaker nor addressee) interpretations, but

¹ Ignored here are all cases of obviation (Anand & Korotkova, 2017).

instead attempting to account for complex patterns alternating between speaker-dependence and addressee-dependence. I will derive these patterns of judgement neither directly from composition nor from a flexible pragmatic calculus, but looking instead to a formal model of discourse and conventional discourse effects in the tradition of Stalnaker (1978), Gunlogson (2001), and Farkas & Bruce (2010). I will defend a connection between the notion of judgement discussed in the subjectivity literature and notion of commitment these models track.

2 Interrogative Flip and Persistence

In (1), truth is typically taken to hold in only those worlds where the sushi is tasty to the speaker—i.e. Jay is the (implicit) judge of *tasty*.²

- (1) **J, to K:** The sushi at Stevenson Cafe is tasty.

In contrast, the question (2) lacks the same pressure for autocentricity, and most typically instead raises the issue of whether the sushi is tasty to the interlocutor Kay. This pattern of judge asymmetry in declarative and interrogative discourse moves is known as INTERROGATIVE FLIP (Faller, 2002; McCready, 2006).

- (2) **J, to K:** Is the sushi at Stevenson Cafe tasty?

Interrogative flip is observed with a variety of expressions which might be interpreted relative to a judge, including some modal expressions in English.

There are two types of content within which judge-dependent expressions most obviously disobey this pattern: presuppositions, and appositives. I'll begin by demonstrating the former. Examples (1) and (2) contain a predicative PPT with a definite subject, but when a PPT is in attributive position within that definite subject (3-4), or a definite object (5-6) the generalization of interrogative flip appears no longer to hold. Rather, in all cases, judgement for the PPT *tasty* is shared among both conversational participants.

- (3) **J, to K:** The tasty bagel is in stock.
 (4) **J, to K:** Is the tasty bagel in stock?
 (5) **J, to K:** Remy will bring the tasty cookies.
 (6) **J, to K:** Will Remy bring the tasty cookies?

We can observe that this exception to interrogative flip is limited to definite DPs, and is not a fact of attributive position in general: the typical, flipping pattern holds for indefinites.

- (7) **J, to K:** More than three talented artists performed at the fair.
 (8) **J, to K:** Did more than three talented artists perform at the fair?

² Exocentric and generic readings are almost always also possible in context. I assume throughout that these are more marked than the interpretations I discuss.

We can see the contrast explicitly in (9-10). In interrogatives, only PPTs within definites also bear with them some speaker judgement, as evidenced by the infelicity of a speaker-centered denial of the PPT (10).

- (9) **J, to K:** Are the bagels tasty? (I find them disgusting.)
 (10) **J, to K:** Is the tasty bagel in stock? (#I find it disgusting.)

Similarly, PPTs within definites bear with them the assumption of shared addressee judgement, or at least acquiescence to speaker authority. Kay's use of *the tasty muffin* in (11) is only successful insofar as Kay assumes her remark will jog Jay's recollection of his personal judgement of the muffin such that he agrees: her judgement alone isn't sufficient, it must be either shared between them or at least generic.

- (11) **J, to K:** There are no good muffins here.
K: No, there's one! The tasty muffin has lavender in it.

This behavior is not limited to definiteness, but seems to be common across all presupposed content: any presupposed judge-dependence must be communally satisfied, or else communally accommodated. Example (12) is inappropriate if Kay doesn't find the muffin tasty, or at least defer to Jay's judgement, and likewise (13) if Jay doesn't.

- (12) **J to K:** I'm so glad that this muffin is tasty!
 (13) **J to K:** Are you glad that the muffin is tasty?

This communality is distinct from the pattern of the other exception to interrogative flip, the behavior of appositives. PPTs in appositives seem to maintain not shared judgement but sole speaker-orientation, whether within a declarative or an interrogative. There is never any attending addressee-judgement.³

- (14) **J, to K:** The poppy-seed bagel, which is tasty, is in stock.
 (15) **J, to K:** Is the poppy-seed bagel, which is tasty, in stock?

We thus are left with the following four generalizations for typical interpretation:

- (16) **SPEAKER JUDGES:** In simple declaratives, judge parameters are evaluated as the speaker.
 (17) **INTERROGATIVE FLIP:** In simple interrogatives, judge parameters are evaluated as the addressee.
 (18) **COMMUNAL PRESUPPOSITIONS:** Within presuppositions, judge parameters are evaluated as universal among the conversation's participants.
 (19) **APPOSITIVE PERSISTENCE:** Within appositives, judge parameters are evaluated as the speaker.

³ Note the sharp contrast between restrictive relative clauses, ("The [poppy-seed bagel which is tasty] is in stock.") which are interpreted within the definite, and reflect the same judgement patterns as attributive PPTs, and these appositives.

3 Judges and Discourse Commitment

The simplest generalization we must account for is that judgement appears to be handed off from the speaker only when that speaker refrains from providing information. I can account for this basic observation, and as it turns out, some of the complexities of presupposition and appositives as well, using the notion of commitment in a commitment-based model of discourse like that presented in Farkas & Roelofsen (2017), with the addition of projected discourse states inspired by Malamud & Stephenson (2015).

3.1 A Commitment-Based Discourse Model

A discourse context DC will be defined as $DC = \langle \text{PARTICIPANTS}, \text{TABLE}, \text{COMMITMENTS}, \text{PROJECTIONS} \rangle$ as in (20).

- (20) a. PARTICIPANTS: The set of participants $\{x_1 \dots x_n\}$ in the conversation.
- b. TABLE: A stack of propositions p to be settled.
- c. COMMITMENTS: A function from participants x to the sets of worlds they are publicly committed to for the purposes of the conversation.
- d. PROJECTIONS: The set of projected discourse states.

We can derive a Stalnakerian common ground (21).

- (21) COMMON GROUND: The smallest set of all possible worlds which all participants are committed to containing the possible world,
i.e. $\bigcup \{ \bigcup \text{COMMITMENTS}(x) \mid x \in \text{PARTICIPANTS} \}$.

In this model, the goal, simplified, is to settle all propositions p on the TABLE by reaching mutual commitment to an alternative of each p , and thus restricting the worlds in the common ground to those consistent with that alternative.

We can model the differences in conversational outcomes from declaratives and interrogatives as differences in how they update the DC: declaratives generate a speaker commitment and raise an issue with projected addressee commitment, while interrogatives raise the issue with no apparent speaker commitment and projected addressee commitment. I formalize these in (22) and (23).

I inherit the inquisitive formalism of Farkas & Roelofsen, such that propositions are sets of possibilities (sets of worlds), and commitments are not to propositions but to possibilities. Declaratives are propositions with a single maximal possibility (or alternative), while interrogatives are propositions with complementary alternatives. Note that in this model, interrogatives do entail a speaker commitment (23b), but it is vacuous, being the set of all possible worlds. This is all in service of the authors' goal of a compositional semantics for interrogatives and standardized discourse effects mapping propositions onto the common ground and speaker commitments.

- (22) x_{sp} uttering a declarative ϕ :

- a. Places unique highlighted alternative⁴ α of ϕ on the table
 - b. Places $\bigcup \phi(= \alpha)$ in $\text{Commitments}(x_{\text{sp}})$
 - c. Projects DC' where $\alpha \in \text{Commitments}'(x_{\text{ad}})$
- (23) x_{sp} uttering a polar interrogative ψ :
- a. Places complementary alternatives $\{\alpha, \bar{\alpha}\}$ of ψ on the table
 - b. Places vacuous possibility $\bigcup \psi(= \bigcup \{\alpha, \bar{\alpha}\})$ in $\text{Commitments}(x_{\text{sp}})$
 - c. Projects DC' and DC'' where $\alpha \in \text{Commitments}'(x_{\text{ad}})$ and $\bar{\alpha} \in \text{Commitments}''(x_{\text{ad}})$

3.2 Deriving Interrogative Flip

Within such an approach, deriving interrogative flip becomes a matter of identity between the locus of commitment and the judge. I adopt a Lasersohnian semantics for PPTs,⁵ making the judge, $J(c)$, part of the context of evaluation c , alongside time, world, etc. (24). Lasersohn suggests that the entire context object, and thus the judge, is not fixedly determined by situations of utterance. I maintain this flexibility, but propose that the patterns discussed here reflect the typical process by which a judge is selected (25).

- (24) **The Giant Dipper is fun.** $\rightsquigarrow \llbracket \text{fun}(\text{The-Giant-Dipper}) \rrbracket_c$
- (25) **JUDGE AS LOCUS OF COMMITMENT:** Other factors absent, a possibility α is evaluated with a context c where the judge $J(c)$ is the conversational participant who adds α to their commitments.⁶

For example, take again the declarative (1), which triggers a commitment from Jay, and projects a commitment from Kay. The DC is updated as in (26).

- (1) **J, to K:** The sushi at Stevenson Cafe is tasty.
- (26) a. $\text{TABLE}_{\text{DC}} += \{\text{tasty}(\text{Stev-Caf-sushi})\}$
 b. $\text{COMM}_{\text{DC}}(J) += \text{tasty}(\text{Stev-Caf-sushi})$
 c. $\text{PROJ}_{\text{DC}} += DC' . \text{tasty}(\text{Stev-Caf-sushi}) \in \text{COMM}'_{\text{DC}'}(K)$

If the locus of commitment is to be the default judge, Jay's commitment will be evaluated with $c : J(c) = J$, and Kay's projected agreement will be evaluated with $c' : J(c') = K$.

Compare the interrogative example (2), which also triggers a commitment from Jay, and projects a commitment from Kay.

- (2) **J, to K:** Is the sushi at Stevenson Cafe tasty?

⁴ Within propositions, we can refer to maximal elements, or alternatives, being the largest and least informative possibilities.

⁵ I do not believe this necessary, but use it here for the purpose of demonstration.

⁶ This has been suggested in other words in Lasersohn (2005), Malamud & Stephenson (2015), and Mericli (2016). My main contribution here is to examine it in conjunction with an explicit model and through a variety of discourse moves.

- (27) a. $\text{TABLE}_{\text{DC}} += \{\text{tasty}(\text{Stev-Caf-sushi}), \neg\text{tasty}(\text{Stev-Caf-sushi})\}$
 b. $\text{COMM}_{\text{DC}}(\text{J}) += \bigcup \{\text{tasty}(\text{Stev-Caf-sushi}), \neg\text{tasty}(\text{Stev-Caf-sushi})\}$
 c. $\text{PROJ}_{\text{DC}} += \text{DC}' . \text{tasty}(\text{Stev-Caf-sushi}) \in \text{COMM}'_{\text{DC}'}(\text{K}) ,$
 $\text{DC}'' . \text{tasty}(\text{Stev-Caf-sushi}) \in \text{COMM}''_{\text{DC}''}(\text{K})$

Here, Jay's commitment is to a trivial possibility, regardless of the judge: the sushi is either tasty or not. The projected response from Kay will be the critical update, and by (25) that response will be Kay-oriented, either that she finds the sushi tasty or doesn't. Interrogative flip is thus a matter of the triviality of a speaker commitment, leaving only the projected addressee response.

3.3 Presuppositions and Appositives

In discourse moves which vary in their update potentials, the prescriptions of (25) will vary in tandem. Take presupposition: Farkas & Roelofsen (2017, fn. 25) refrain from providing a full account of presupposition, but it seems natural to approach it as requiring the common ground already to be restricted in a certain way: e.g. *John's sister* may only be felicitous in a conversation if all participants must share commitment to the possibility that John has a sister. I also presume we leave open the usual path for accommodation in light of a presupposition: unsatisfied presuppositions may encourage all speakers to update their commitments and effect the appropriate restriction of the common ground. This kind of commitment update does not find its motivation on the table, and also never involves any initial commitment of the individual speaking.⁷

- (28) x_{sp} presupposing content π :
 a. Places nothing on the table
 b. Requires $\bigcup \pi(= \alpha)$ in $\text{Commitments}(x_i)$ for every conversational participant⁸

By the principle in (25), this universal commitment involves each individual committing to their own autocentric view, deriving our generalization (18).

The discourse effects of appositives are controversial (Potts, 2005; AnderBois et al., 2015). On the one hand, they are clearly non-presuppositional, carrying the same redundancy infelicity as assertions. On the other hand, appositive content is to some extent non-deniable⁹ and does not interact with the question under discussion. AnderBois et al. (2015) suggest that appositives have a similar table-free update to presuppositional accommodation, but more forceful, imposing rather than inviting update. Putting these objects into the common ground makes sense, as, they can satisfy presuppositions in later asserted content (29).

⁷ Murray (2009) and AnderBois et al. (2015) propose very similar table-circumventing update potentials for evidentials and for appositives, see below.

⁸ An exception to the standard discourse effects of Farkas & Roelofsen (2017).

⁹ Though AnderBois et al. (2015) discuss the apparent deniability of sentence-final appositives, including their apparent felicity as hosts of tag questions.

(29) John, who had been kissed by Mary, kissed her too.

If we adopt some version of their account, which I will simplify by treating like a separate discourse move (30),¹⁰ the proposal in (25) can account for the lack of interrogative flip.

- (30) x_{sp} uttering appositive ξ :
- a. Places nothing on the table
 - b. Places $\bigcup \xi (= \alpha)$ in $\text{Commitments}(x_i)$ for every conversational participant

We fail, however, to make the distinction discussed in §2 between communal attributive PPTs and apparently speaker-centered appositives. That pattern would suggest instead that there is only ever a speaker commitment, at odds with (29) where appositive content is presupposed to be in the common ground. Instead, we end up deriving communal judgement for all appositives. Perhaps the distinction is indeed illusory, or related more to the difference between requirement and imposition. Otherwise, we need an account for the apparent exception.

3.4 Interim Summary

Commitment-based discourse models are tasked with sorting out the effects of discourse moves on the commitments and projected commitments of conversational participants. I've shown that the choices which might be made in modeling these commitments pattern with the behavior of judge-dependent expressions, allowing the generalization of interrogative flip to be reduced to the absence of information-providing speaker commitment in standard questions.

More complexity is visible in the two apparent exceptions to interrogative flip, accommodated presuppositions and appositives. Both of these types of content must be modeled separately from the main discourse move in a commitment-based model, and as a consequence, commitment and judgement are free to move independently of matrix interrogativity. One apparent failure of this proposal is its inability to account for the potential difference in non-flip between presupposition and appositives. This calls into question either judgements of judge-hood, or the ability of this proposal to generalize across the full variety of discourse moves.

In the following section, I'll discuss the predictions this simple account makes for the non-standard moves of rising declaratives and tag questions, and briefly address the phenomenon of faultless disagreement with subjective expressions.

4 Extensions and Refinements

4.1 Non-Standard Discourse Moves

Much of the recent literature on commitment-based discourse models applies them to sorting out the behavior of non-standard discourse moves like Ris-

¹⁰ This is incompatible with appositives' ability to both introduce to and reference from asserted content, though note that appositives do appear to be set aside during online interpretation of their containing sentence (Dillon et al., 2017).

ing Declaratives (RDs) (31) and Rising Tag Questions (RTQs) (32) (Reese & Asher, 2006; Malamud & Stephenson, 2015; Farkas & Roelofsen, 2017; Rudin, 2018, e.g.). Adopting some of these accounts—Rudin (2018) on RDs and basically Farkas & Roelofsen (2017) on RTQs—I show in this section that tying judgement to commitment can continue to make the right predictions.

- (31) Napoleon died in America?
 (32) Napoleon died in America, didn't he?

The major accounts for these marked discourse moves agree that they behave in ways inconsistent with basic declaratives and interrogatives. For Rudin (2018), RDs differ from falling declaratives in that they lack any speaker commitment, and from polar interrogatives in that, like falling declaratives, they still project a specific commitment on behalf of the addressee, rather than leaving the matter entirely open.¹¹ For Farkas & Roelofsen (2017), following in the essence of the complex-move proposal of Asher & Reese (2007), opposite-polarity tag questions indicate declarative-like, but evidentially-hedged, commitment of the speaker along with the interrogative-like raising of an issue for addressee response.¹² I represent these proposals consistent with my prior notation in (33) and (34).

- (33) x_{sp} uttering a rising declarative ρ :
 a. Places unique highlighted alternative α of ρ on the table
 b. Places nothing in $\text{Commitments}(x_{sp})$
 c. Projects commitment of x_{ad} to $\bigcup \rho (= \alpha)$
 (34) x_{sp} uttering a rising tag interrogative τ :
 a. Places complementary alternatives $\{\alpha, \bar{\alpha}\}$ of τ on the table
 b. Places vacuous possibility $\bigcup \psi (= \bigcup \{\alpha, \bar{\alpha}\})$ in $\text{Commitments}(x_{sp})$ with some level of evidence supporting α
 c. Projects commitment of x_{ad} to α or $\bar{\alpha}$

By the principle in (25), every commitment should engender the committer's judgement to context-sensitive material within that possibility. We would thus expect only addressee-judgement projected by RDs, and tentative speaker judgement alongside projected addressee judgement in RTQs. This prediction is borne out by the behavior of PPTs in these moves (Malamud & Stephenson, 2015).

PPTs within RDs seem to be solely addressee-oriented much like questions. They are fully appropriate when used in a setting in which the speaker has evidence towards addressee-dependent truth, but speaker-dependent falsehood (35). On the contrary, PPTs within RTQs are not appropriate in such a context (36): they suggest speaker-dependent truth.

¹¹ Farkas & Roelofsen (2017) differ in suggesting a speaker's doubting commitment alongside typical interrogative issue-introduction. Rudin (2018) derives speaker doubt as Gricean implicature from the choice to avoid the unmarked question.

¹² Malamud & Stephenson (2015) differ slightly, suggesting that both the speaker and addressee commitments are projected.

Context. *Jay and Kay see a movie. He doesn't enjoy it, but she laughs throughout and walks out smiling. Jay turns to her with a frown and says:*

(35) That was fun?

(36) #That was fun, wasn't it?

Indeed, the reverse pattern holds if the speaker has evidence towards mutual truth: an RD is infelicitous (37) and an RTQ is perfect (38).¹³

Context. *Jay and Kay see a movie. They both enjoy it, laughing throughout the movie, and walk out smiling. Jay turns to Kay and says:*

(37) #That was fun?¹⁴

(38) That was fun, wasn't it?

It's clear from these patterns that more than a simple divide between declaratives and interrogatives, or even rising and falling tunes, a la interrogative flip is needed to capture the behavior here. There are distinctions in judgement more fine-grained than binary which a connection between commitment and judgement is able to capture with some ease.

4.2 Faultless Disagreement

One of the literature's widely-used tests for this variety of context-dependence is the notion of faultless disagreement (Lasnik, 2005; Bylinina, 2017): disagreeing discourses that proceed from subjective assertions seem simultaneously disagreeing and permissibly divergent (39), unlike objective disagreements (40), which trigger a conversational crisis (Farkas & Bruce, 2010), requiring debate and re-examination of commitments. If the crisis cannot be resolved, participants must agree to disagree, tantamount to admitting conversational failure given the goal of building common ground.

(39) **J, to K:** The sushi at Stevenson Cafe is tasty. **K:** No, it's not.

(40) **J, to K:** The Great Dipper is 100 years old. **K:** No, it's not.

J: But I read somewhere that it was built in the 1910's!

K: No, it was built in the 20's. **J:** Oh, I see.

My proposal as it stands can easily explain disagreement. If we define disagreement independent from truth, following Lasnik (2005), we find *tasty(x)* and \neg *tasty(x)* appropriately disagreeing, as indeed inquisitive approaches like

¹³ Biased questions, like "Wasn't that fun?", seem to have basically the same distribution and analysis as RTQs (Asher & Reese, 2007).

¹⁴ It occurs that this could be felicitous with an extremely marked rise and a heavy boundary immediately before *fun* if Jay wasn't expecting to find the movie fun. I'm not sure how this might be handled, but it seems to be a different discourse move altogether.

Roelofsen & Farkas (2015) require in order to explain the felicity of negative polarity particles in these disagreements.

The remaining issue is faultlessness. There may be a path open for a commitment-based model to build in a formal difference between subjective and objective commitments such that the former are faultless¹⁵, but here I will take a simpler path. As Kölbel (2004) writes, it may be the case that some disagreements are simply expected or permissible: in some sense, the step of conversational termination or agreement to disagree in these cases is not disaster, and so faultless. This would place linguistic subjectivity in the same category with statements of spiritual certainty and other topics banned from holiday dinners. The disagreement is real and the common ground will not be successfully updated, but when we expect continuing would be fruitless, it is conversationally rational to simply discard a topic.

5 Conclusion and Further Directions

In the above pages I have presented data which supports particular generalizations about the relationship between discourse commitment and judge assignment for several context-dependent constructions. Judgement undergoes interrogative flip in standard polar interrogatives, but remains subject to alternate requirements in presupposition accommodation and appositives. Rising declaratives closely resemble basic interrogatives, but rising tag interrogatives place demands on the judgement of both speaker and addressee. The manner in which we might formalize standard discourse commitment across this heterogeneous group closely predicts these judgement facts.

This account as I have framed it stands as an supplement to context-shifting and pragmatic perspective accounts, approaching complex patterns of shifting between speaker and addressee judgement left largely untouched in those bodies of work. Indeed, with judgement as simply the product of discourse commitment, we can capture complexities of subordinate and marked discourse moves that belie a simple notion of interrogative flip.

One obvious question that I do not address here is how this proposal might relate to the embedding, genericity, and exocentric judgement facts. I leave this to future work, but will note that in particular, the most interesting investigation promises to be those examples where judgement and commitment seem clearly to pattern separately: for instance, the conditional antecedents and temporal adjuncts discussed by Bylinina et al. (2014).¹⁶

Acknowledgements. The author is grateful to Donka Farkas for the conversations which helped to inspire this paper, and Pranav Anand for the conversations which helped to finish it. Thanks also to Morwenna Hoeks, Stephanie Rich, and very helpful reviewers.

¹⁵ One approach: changing the nature of the tabular proposition so that disagreement with a subjective claim does not prevent the successful settlement of the issue.

¹⁶ I thank a reviewer for this suggestion.

Bibliography

- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780198759515.013.1>.
- Amaral, Patricia, Craige Roberts & E. Allyn Smith. 2007. Review of *The Logic of Conventional Implicatures*. *Linguistics and Philosophy* 30(6). 707–749.
<https://doi.org/10.1007/s10988-008-9025-2>.
- Anand, Pranav & Natasha Korotkova. 2017. Acquaintance content and obviation. In *Proceedings of SuB 22*, ZAS.
- AnderBois, Scott, Adrian Brasoveanu & Robert Henderson. 2015. At-issue proposals and appositive impositions in discourse. *Journal of Semantics* 32. 93–138.
<https://doi.org/10.1093/jos/fft014>.
- Asher, Nicholas & Brian Reese. 2007. Intonation and discourse: biased questions. In Shinichiro Ishihara, Stefanie Jannedy & Anne Schwarz (eds.), *Interdisciplinary studies on information structure* 8, 1–38. Universitätsverlag Potsdam.
- Bylinina, Lisa. 2017. Judge-dependence in degree constructions. *Journal of Semantics* 34. 291–331.
- Bylinina, Lisa, E. McCready & Yasutada Sudo. 2014. The landscape of perspective shifting. Pronouns in Embedded Contexts at the Syntax-Semantics Interface, Tübingen.
- Dillon, Brian, Jr. Clifton, Charles, Shayne Sloggett & Lyn Frazier. 2017. Appositives and their aftermath: Interference depends on at-issue vs. not-at-issue status. *Journal of Memory and Language* 96. 93–109.
- Faller, Martina T. 2002. *Semantics and pragmatics of evidentials in Cuzco Quechua*: Stanford University Dissertation.
- Farkas, Donka F. & Kim B. Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27. 81–118. <https://doi.org/10.1093/jos/ffp010>.
- Farkas, Donka F. & Floris Roelofsen. 2017. Division of labor in the interpretation of declaratives and interrogatives. *Journal of Semantics* 34. <https://doi.org/10.1093/jos/ffw012>.
- Gunlogson, Christine. 2001. *True to form: Rising and falling declaratives as questions in English*: UC Santa Cruz Dissertation.
- Harris, Jesse A. 2012. *Processing perspectives*: UMass Amherst Dissertation.
- Harris, Jesse A. & Christopher Potts. 2009. Perspective-shifting with appositives and expressives. *Linguistics and Philosophy* 32(6). 523–52. <https://doi.org/10.1007/s10988-010-9070-5>.
- Kölbel, Max. 2004. Faultless disagreement. *Proceedings of the Aristotelian Society* 104. 53–73.
- Korotkova, Natasha. 2018. Less is more: Revisiting interrogative flip. Talk at *Meaning in non-canonical questions*, University of Konstanz.

- Kratzer, Angelika. 1981. The notational category of modality. In Hans J. Eikmeyer & Hannes Reiser (eds.), *Words, worlds, and contexts: New approaches in word semantics*, 38–74. Berlin: De Gruyter. <https://doi.org/10.1515/9783110842524-004>.
- Lasersohn, Peter. 2005. Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy* 28. 643–86. <https://doi.org/10.1007/s10988-005-0596-x>.
- Malamud, Sophia A. & Tamina Stephenson. 2015. Three ways to avoid commitments: Declarative force modifiers in the conversational scoreboard. *Journal of Semantics* 32. 275–311. <https://doi.org/10.1093/jos/ffu002>.
- McCready, E. 2006. Context shifting in questions and elsewhere. In *Proceedings of SuB 11*, 433–447. Barcelona: Universitat Pompeu Fabra.
- Merikli, Benjamin S. 2016. *Modeling indirect evidence*: UC Santa Cruz Thesis.
- Murray, Sarah E. 2009. A Hamblin Semantics for evidentials. In *Proceedings of SALT 19*, 324–341. The Ohio State University. <https://doi.org/10.3765/salt.v19i0.2543>.
- Potts, Christopher. 2005. *The logic of conventional implicatures*. Oxford Studies in Theoretical Linguistics. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199273829.001.0001>.
- Potts, Christopher. 2007. The expressive dimension. *Theoretical Linguistics* 33(2). 165–97. <https://doi.org/10.1515/tl.2007.011>.
- Reese, Brian & Nicholas Asher. 2006. Prosody and the interpretation of tag questions. In *Proceedings of SuB 11*, 448–462. Barcelona: Universitat Pompeu Fabra.
- Roelofsen, Floris & Donka F. Farkas. 2015. Polarity particle responses as a window onto the interpretation of questions and assertions. *Language* 91. 359–313.
- Rudin, Deniz. 2018. *Rising above commitment*: UC Santa Cruz Dissertation.
- Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26(1). 29–120. <https://doi.org/10.1023/a:1022225203544>.
- Schlenker, Philippe. 2007. Expressive presuppositions. *Theoretical Linguistics* 33. 237–245. <https://doi.org/10.1515/tl.2007.017>.
- Stalnaker, Robert C. 1978. Assertion. In *Syntax and Semantics*, vol. 9, 78–95. New York: Academic Press.
- Stephenson, Tamina. 2007. Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and Philosophy* 30(4). 487–525. <https://doi.org/10.1007/s10988-008-9023-4>.