Just Refuses to Answer the QUD

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1 Introduction

- Usually, it is infelicitous to provide a trivial answer to a question, but with *just*, a common discourse particle in English, it becomes possible (1).[1]

(1) A: Why did Skip stop texting you?
B: They just did. / # They did.

- I try to explain this contrast, first noted by Wiegand (2016), with two goals in mind:

  1. To show that *just* in (1) constitutes a previously unidentified sense which I call ABSTENTIVE *just*, thereby contributing to a recent push to more fully characterize the uses of *just* (Coppock and Beaver, 2013; Beltrama, 2016, 2018; Wiegand, 2016, 2017, 2018; Laparle and Truswell, 2018).
  2. To explore the dynamics of refusing to address a question in QUD models of discourse such as Roberts's (1996/2012), using Cohen and Krifka's (2014) commitment space framework to model possible future states of the discourse.

- **Central claims:**

  - Abstentive *just* conveys that the speaker abstains from performing alternative speech acts. Following suggestions by Wiegand (2016) and Beltrama (2018), abstention is formalized as Cohen and Krifka's (2014) denegation operator.
  - Abstentive *just* and similar UNEXPLANATORY *just* (Wiegand, 2016) are syntactically and semantically distinct, though (1) can be understood with both senses.
  - Trivial answers like (1) and other abstentive discourse moves e.g. (2) are felicitous because they advance the discourse by removing a QUD from the stack.

(2) A: Why did Skip stop texting you?
B: I don't know. / I'd rather not say. / Let's discuss something else.

  - Roberts's (1996/2012) disjunctive conditions for popping the current QUD from the stack when it is exhaustively answered or unanswerable can be naturally unified in Cohen and Krifka's (2014) framework.

[1]My thanks go to Omar Agha, Chris Barker, Floris Roelofsen, and Philippe Schlenker for discussions, as well as audiences at NYU Semantics Group and Philippe's Foundational Topics in Semantics student session.

2 Previous Work on *just*

- At a purely descriptive level, *just* appears to be highly polysemous (Lee, 1987).
  - My aim is to sharpen these distinctions. I leave the challenging problem of unifying (some of) *just*'s senses to future work.
- There are several recent analyses focusing on various meanings of *just* (Coppock and Beaver, 2013; Beltrama, 2016, 2018; Wiegand, 2016, 2017, 2018; Laparle and Truswell, 2018). Of these, only Wiegand (2016) discusses examples like (1).

2.1 Coppock and Beaver (2013)

- Coppock and Beaver (2013) analyze *just* as an exclusive particle like *only* on the basis of their apparent synonymy in sentences like (3).
  - Simplifying slightly, exclusives deny the stronger alternatives of the prejacent and presuppose that there is a true alternative that is at least as strong as the prejacent (4).[2]

(3) I only/just saw one shooting star.

(4) $\textsc{excl} = \lambda p \lambda w[\forall p'_{\in ALT(p)}[p' \subseteq p \rightarrow \neg p'(w)]]$
$\textsc{excl}(p)(w)$ is defined only if $\exists p'_{\in ALT(p)}[p \subseteq p' \wedge p'(w)]$

2.2 Wiegand (2016)

- Wiegand (2016) notes that unlike *only*, *just* has an UNEXPLANATORY meaning (5) where it adds the entailment that the prejacent lacks an explanation.

(5) (I walked in and) The lights just turned off!

- Wiegand's is the only prior work that discusses examples like (1), and she suggests that *just* in that example is unexplanatory.
- Wiegand's basic analysis of these examples, shown in (6), has two parts:
  1. *Just* is an exclusive, as in Coppock and Beaver (2013).
  2. The prejacent contains a covert adjunct $\textsc{cause}_0$ which is defined as follows:
     - $\textsc{cause}_0$ is semantically vacuous, i.e. $[\![\textsc{cause}_0]\!] = \lambda p[p]$.

[2] The alternatives of p are denoted $ALT(p)$. I assume that alternatives compose by pointwise function application (Kratzer and Shimoyama, 2002).

- $ALT(\text{CAUSE}_0)$ is the set of all other cause adjuncts, i.e. functions of the form $\lambda p[p \wedge \text{BECAUSE}(q)(p)]$, where q is an arbitrary proposition, and $\text{BECAUSE}(q)(p) = 1$ iff q is a cause of p.

(6) $[\![(5)]\!] = \text{EXCL}([\![\textit{the lights turned off } [\cancel{\text{CAUSE}}_0]^F]\!])$

- The formula in (6) is true iff the lights turned off and the light's turning off has no cause.[3] This aligns with intuitions about a possible meaning of (5).

2.3 Other Uses of *Just*

- Beltrama (2016, 2018) discusses EMPHATIC uses of *just*, where *just* as well as *simply* has an intensifying effect, as shown in (7).
  - He analyzes *just* here as an exclusive with metalinguistic alternatives.

(7) a. This soup is just delicious!
b. That book is simply massive!

- Laparle and Truswell (2018) discuss scalar uses of *just* like those shown in (8).
  - They observe that in each example, *just* seems to contribute that the subject's position on some scale (e.g. distance behind the tree) is close to some anchor point (e.g. adjacent to the tree).

(8) a. The ball is just behind the tree.
b. John just left.

3 Abstentive *just* is not Unexplanatory *just*

- I argue that in examples like (1), *just* is ambiguous between abstentive and unexplanatory uses, giving rise to two distinct readings.
  - On the unexplanatory reading, the speaker asserts that Skip stopped texting for no reason whatsoever (following Wiegand's (2016) analysis).
  - The abstentive reading is consistent with there being a reason; the speaker simply refuses to provide it, perhaps out of ignorance or reluctance.
- This contradicts Wiegand's (2016) suggestion that both cases can be analyzed as unexplanatory *just*.

[3] This is assuming that the domain of alternative reasons is restricted by relevance. Of course, (modulo quantum mechanics) every event can be given an explanation in terms of laws of motion and a sufficiently detailed description of the physical environment.

- Wiegand derives the ignorance reading as the result of an epistemic modal over the covert clause. The reluctance reading can be given a similar analysis but with a bouletic modal.

- Beyond the (intuitive) difference in truth conditions between the two readings, I identify that the abstentive and unexplanatory readings have divergent behavior with respect to direct denials and embedding.

3.1 Difference 1: Direct Denial

- The causelessness entailment of unexplanatory *just* can be directly denied, while the ignorance/reluctance inference of abstentive *just* cannot.

  - Direct deniability is a test of at issueness (Potts, 2005; Tonhauser et al., 2018).
  - Therefore, causelessness is at issue, while ignorance/reluctance is not.

- In (9), the unexplanatory and abstentive (ignorance) readings are salient.

(9) A: Why did the light turn off?
B: It just did.
C: No it didn't. (two readings: *There **is** a reason.* / *The light didn't turn off at all.*)

  - Unexplanatory reading: B makes the claim that the lights turning off is causeless, which C directly denies.
  - Abstentive reading: B expresses ignorance of the cause. C's direct denial cannot be interpreted as a denial of the claim that B is ignorant, only as a denial of the claim that the light turned off.

- In (10), only the abstentive (reluctance) reading is plausible, so the denial cannot be interpreted as a denial of causelessness.

(10) [Context: Mom is pregnant, and Dad knows this fact.]
Kid: Why did Mommy's belly get so big?
Dad: It just did.
Mom: No it didn't. (only reading: *Mom's belly didn't get big.*)

  - Unexplanatory reading (implausible): Unless the dad is being dishonest, he cannot claim that there is no explanation for the mom's big belly.[4] Accordingly, the mom's denial cannot (plausibly) be understood as targeting such a claim.
  - Abstentive reading: The dad is reluctant to answer the kid's question. The only natural way to understand the mom's denial is as a denial of the claim that her belly got big, not that the dad is reluctant.

[4] I leave aside the possibility that the dad is being intentionally dishonest.

3.2 Embedding *just*

- Unexplanatory *just* freely occurs in embedded clauses, while abstentive *just* is (mostly) restricted to matrix clauses (see Section 5.2 for an exception).
- In (11), A's question has *wh*-extraction out of an embedded clause, and B's response can have *just* in either the matrix or embedded position. As in (1), the response without *just* is bad (11-c).
- The intended reading of A's question is how the Gnostics rationalize Jesus' death (not their justification for believing that he died).

(11) A: Why did the Gnostics believe [Jesus died ___]?

a. B: They believed he just did.
b. B: They just believed he did.
c. B: # They believed he did.

- Embedded *just* (11-a): B's response conveys that the Gnostics believed that Jesus died for no reason whatsoever (unexplanatory).
- Matrix *just* (11-b): B is ignorant about the Gnostics beliefs or reluctant to speak about them (abstentive). B is not committed to any facts about the Gnostics beyond the prejacent.[5]

3.3 Conclusions

- Two contrasts between unexplanatory and abstentive *just* must be accounted for:
  1. With unexplanatory *just*, the causelessness inference of unexplanatory *just* is at issue, but with abstentive *just* only the prejacent is (the ignorance/reluctance inference is not).
  2. Unexplanatory *just* can occur in both matrix and embedded clauses, while abstentive *just* is restricted to matrix clauses.
- Wiegand's (2016) unified account predicts that:
  1. Both inferences should be at issue.
  2. Both inferences should be embeddable.
- I subsequently propose an additional lexical entry for *just* which captures these contrasts as a result of lexical ambiguity of *just*.

[5](11-b) also has an unexplanatory reading, which can be paraphrased as *The Gnostics believed without reason that Jesus died.* This response is infelicitous because it does not address A's question, but rather addresses Gnostics' justification for their belief.

4 Analysis

- Intuition: Abstentive *just* conveys that the speaker refuses from performing any salient alternative illocutionary acts besides the prejacent.
- This analysis can be seen as lifting lifting the semantics of exclusives (4) to the level of illocutionary acts. Rather than negating alternative propositions, the speaker refuses to perform alternative speech acts.
- Refusal to perform a speech act is formalized as DENEGATION in the Commitment Space framework of Cohen and Krifka (2014).
  - This is, I believe, the first formal implementation of a denegation analysis for *just*, which is informally suggested by Wiegand (2016) and Beltrama (2018).

4.1 Commitment Space Framework (Cohen and Krifka, 2014)

- An I-STATE (short for illocutionary state) I is a set of illocutionary acts.
- The context K is a set of illocutionary states called the COMMITMENT SPACE.
  - Each member of K is a possible future I-state of the discourse.
  - K has a distinguished element, $\sqrt{K}$, corresponding to the current I-state of the discourse. I.e. all the information in $\sqrt{K}$, or *info*$(\sqrt{K})$ is the context set.
  - Every other $I \in K$ is a possible future I-state reachable by monotonically adding further illocutionary acts to $\sqrt{K}$.
- K **is dynamically updated** throughout the discourse as new illocutionary acts are performed, as defined in (12), (13), and (15); and illustrated in Figure 1 and 2.
- **Regular update:** Performance of an act A updates K by eliminating all $I \in K$ that do not contain A:

(12) $K + A =_{def} \{I_{\in K} \mid (\sqrt{K} \cup \{A\}) \subseteq I\}$

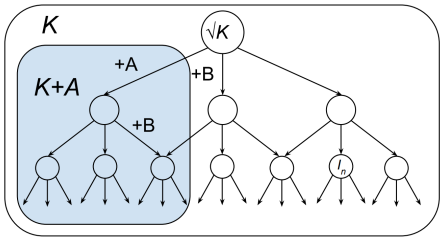

Figure 1: Updating $K + A$.

- **Denegation update:** Performance of the denegation of A, $\sim A$, is the complement of updating with A: all $I \in K$ that *do* contain A are eliminated:

(13) $K + \sim A =_{def} K \setminus (K + A)$

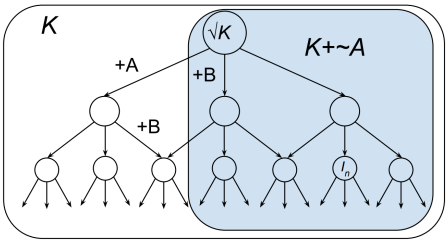

Figure 2: Updating $K + \sim A$.

- Motivation: Cohen and Krifka intend for denegation to model the refusal to perform a speech act, which is distinct from negating the proposition under the illocutionary operator (14).

(14)
a. $K + [\![$*I promise to clean up*$]\!]$ = $K +$ PROMISE$([\![$*I clean up*$]\!])$
b. $K + [\![$*I don't promise to clean up*$]\!]$ = $K + \sim$PROMISE$([\![$*I clean up*$]\!])$
c. $K + [\![$*I promise not to clean up*$]\!]$ = $K +$ PROMISE$(\neg[\![$*I clean up*$]\!])$

- **Conjunctive update:** Performance of a conjunctive speech act $A\&B$ is equivalent to the intersection of the update with A and the update with B

(15) $K + A\&B =_{def} (K + A) \cap (K + B)$

4.2 Lexical Entry for Abstentive *just*

- The lexical entry for abstentive *just* is given in (16), and its effect is illustrated in Figure 3.

(16) $[\![$*just*$_{\text{abst}}]\!] = \lambda p \lambda F \lambda K[(K + F(p)) \cap (K + \&\{\sim F(p') \mid p' \in ALT(p)\})]$

  - *Just* scopes over the utterance's illocutionary force operator F.
  - The entire utterance is a context change potential that updates K with:
    1. The prejacent $(K + F(p))$, and
    2. The denegations of all the alternatives of the prejacent $(K + \&\{\sim F(p') \mid p' \in ALT(p)\})$.

- Example: The analysis of (1) is illustrated in (17):

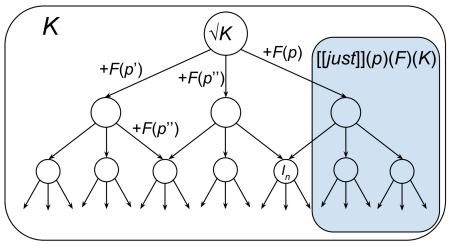

Figure 3: Updating K with $[\![\textit{just}_{\text{abst}}]\!](p)(F)$, where p' and p'' are the alternatives of p.

(17) $[\![\text{Skip just stopped texting}]\!](K)$
$= (K + \text{ASSERT}(\textbf{st}(s))) \cap (K + \&\{\sim\text{ASSERT}(p') \mid p' \in ALT(\textbf{st}(s))\})$

– K is updated with the assertion that Skip stopped texting and the denegations of all the alternative assertions, i.e. any potential future I-state I containing an alternative assertion is removed from K.

5 Predictions

5.1 Deniability

- **Deniability** facts in (10) are predicted:
- Denegations are "meta-speech acts" (Cohen and Krifka, 2014), i.e. they are not at issue content. Hence, the denegation of alternatives, i.e. the speaker's refusal to assert (perform) alternatives, is not at issue and not deniable.
- The speaker asserts (performs) the prejacent, hence it *is* at issue and deniable.

5.2 Embedding

- **Embedding** facts in (11) are predicted:
- Unexplanatory *just* is an ordinary exclusive, explaining why it can embed freely.
- Abstentive *just* is a speech act operator, explaining why it occurs in matrix clauses (11-b), but not embedded clauses (11-a).
  – It is often assumed that only matrix clauses have illocutionary force (Green, 2000), and abstentive *just* takes an illocutionary operator F as argument.
  – Similarly, speech act operators like *frankly*, cannot modify embedded clauses (Green, 1976) (18).

(18) a. Frankly, you're a nuisance.

b. *I'm disappointed frankly that you're a nuisance.

- There is an exception: abstentive *just* embeds under speech report verbs (19-a).
  - There is an abstentive reading where B reports that Betsy or the engineers declined to answer the question.

(19) a. A: Why did Betsy say Skip stopped texting her?
B: She said they just did.
b. A: How did the engineers say they fixed the bug?
B: They said they just did.

  - Likewise, Krifka (2014) observes that speech act operators can modify content embedded under speech report verbs (20).
  - On the basis of such examples, he argues that these verbs take an illocutionary act (or perhaps a context change potential) as argument, explaining why abstentive *just* is licensed.

(20) Ann said frankly that you're a nuisance.

5.3 Other Illocutionary Acts

- Prediction: *just* can scope over other illocutionary acts, e.g. directives (imperatives).[6]
  - The idea that *just* scopes over imperatives has been independently suggested by Coppock and Beaver (2013) and Wiegand (2016).
- This immediately accounts for the contrast in (21), noted by Warstadt (2018).

(21) a. Just add water! $(\textit{just} > IMP)$
b. Only add water! $(IMP > \textit{only})$

- With *just* the imperative most naturally has a "permissive" reading:

[6]However, abstentive *just* is marginal with questions (thanks to Paloma Jeretič for this observation). Indeed, examples like (i-a) may be heard in informal speech with a prosodic break after *just*, and the phrase *just why* (i-b) is an internet meme (thanks to Lucas Champollion for pointing me to this). As predicted, these examples convey that the speaker does not wish to ask any salient additional question. However they are significantly less idiomatic than other uses of abstentive *just*. It should be noted that examples like (ii) which can be paraphrased with *what exactly* are not abstentive, but rather resemble the precise usage in (8).

(i) a. ?? Just...who are you?
b. Just why? (https://www.reddit.com/r/memes/search?q=just%20whyrestrict_sr=1)

(ii) ? Just what do you think you're doing?

  - The addressee has no obligations beyond adding water.
  - This reading is derived with abstentive *just* scoping over the imperative: the speaker abstains from performing alternative imperatives (i.e. abstains from obligating the addressee to perform additional actions).

- With *only* the imperative must have a "strict" reading:
  - The addressee is obligated to add water and to take no additional action.
  - *only*, unlike *just*, does not have a lexical entry that allows it to scope over the imperative force operator.
  - This reading is also available with *just*, when it is an exclusive.

5.4 Ignorance and Reluctance

- As discussed previously, abstentive answers with *just* often give rise to the inference that the speaker is ignorant of or reluctant to provide the answer.
- This is not an entailment of the entry for abstentive *just*.
- Instead, I suggest that it is an (defeasible) pragmatic inference.
- The inference proceeds as follows: Refusing to answer a direct question is uncooperative. The speaker would not violate the cooperative principle without justification. Therefore, the speaker must have a reason for refusing to answer the question. Ignorance and reluctance are simply salient possible reasons.

6 Trivial Answers

- **Puzzle**: Example (1), repeated in (22) begs the question: Why are trivial answers to questions generally infelicitous, and how does abstentive *just* "rescue" them?
- **Proposal (sketch)**: Without *just*, trivial answers fail to move the discourse forward; with *just* trivial answers make progress by eliminating the topmost QUD(s) from the stack.

(22) A: Why did Skip stop texting you?
B: They just did. / # They did.

6.1 QUDs: Constraining Discourse Moves

- The QUD model of discourse (Roberts, 1996/2012; Ginzburg, 1996) constrains the possible moves at a given point in the discourse in relation to a set (usually a stack) of Questions Under Discussion.

- Farkas and Bruce (2010): "When the [QUD stack] is not empty, the immediate goal of the conversation is to empty it, i.e. to settle the [question] at hand."
  - Following this principle, I suggest the Maxim of QUD Progress:

(23) **QUD Progress**: A move m is felicitous only if it makes progress towards emptying the QUD stack. Progress is made by eliminating the topmost QUD or some of its possible answers, or initiating a strategy for addressing the topmost QUD.

- Ordinary trivial answers are ruled out by QUD Progress.

6.2 Popping QUDs

- "[A] question is popped off the stack if it is answered or **determined to be (practically) unanswerable**" (Roberts, 1996/2012, emphasis mine).
  - The second disjunct refers to abstentive answers (recall (2), repeated in (24)).

(24) A: Why did Skip stop texting you?
  a. B: I don't know. / I'd rather not say. / Let's discuss something else.

- Exhaustive and abstentive answers can be unified in the Commitment Space framework (Cohen and Krifka, 2014), allowing for a single condition for popping QUDs.
  - Intuitively, whether a question Q has been exhaustively answered or is unanswerable, all the future I-states of the discourse in K will say the same thing about Q.
  - Since there is no hope of learning more about Q, it is useless to have Q on the stack and it can be removed.
  - This is stated formally in (25), where Q is a set of alternative propositions corresponding to the exhaustive answers to the question (i.e. it is a partition).
  - $\text{ANS}_Q(I)$ is the set of alternatives in Q consistent with all the information in I-state I (26).

(25) **Condition**: Pop Q off the top of the stack if $\forall I_{\in K} \forall I'_{\in K} [\text{ANS}_Q(I) = \text{ANS}_Q(I')]$

(26) **Answerhood**: $\text{ANS}_Q(I) =_{def} MAX_{Q' \subseteq Q}[\forall q_{\in Q'}[q \cap \textit{info}(I) \neq \emptyset]]$

6.3 Result: Trivial Abstentive Answers Are Licensed

- Abstentive trivial answers with *just* (22) can be shown to meet the condition for popping the QUD, hence they do not violate QUD Progress.

- Following Beaver and Clark (2008), I assume the alternatives of the prejacent are sensitive to the current QUD, and include all its answers.
- Since *just* denegates all these alternatives, they are absent from, but still consistent with all I in K.
- In other words $\forall I_{\in K}[\text{ANS}_Q(I) = Q]$, so A's question is popped off the stack by (25).

6.4 Result: Irrelevant Abstentive Answers Are Licensed

- Abstentive *just* also licenses irrelevant answers (27).

(27) A: Why did Skip stop texting you?
B: I just hope they respond eventually. / ?# I hope they respond eventually.

- The infelicity of ordinary irrelevant answers is predicted by answerhood constraints in Roberts's (1996/2012) QUD theory.
- However, the at issue content must still be relevant to *some* QUD (28).

(28) A: Why did Skip stop texting you?
B: #I just like don't like spam.

  - In (27), B's response is presumably relevant to a higher QUD, such as "How does B feel about the texting situation?", which A's question subserves.

- Similar responses can actually pop several QUDs off the stack, as in (29).
  - The boxes on the right depict the QUD stack *following* each utterance.
  - A's final utterance suggests that she is exasperated by the direction of the discussion, and wishes to "exit out of" the line of inquiry.

(29)

A: What should I bring to the picnic?	What should A bring?
B: Can you bring beer?	Can A bring beer? What should A bring?
A: We're not allowed to drink in the park.	Is drinking allowed in the park? Can A bring beer? What should A bring?
B: But they don't enforce that, right?	Are open container laws enforced? Is drinking allowed in the park? Can A bring beer? What should A bring?
A: I'll just bring soda.	

7 Conclusion

- Abstentive *just* has a meaning and distribution distinct from other uses, e.g. exclusive and unexplanatory *just* (Coppock and Beaver, 2013; Wiegand, 2016).
- Answers with abstentive *just* act as a refusal to address the QUD. Their discourse effect is to remove the topmost QUD(s) from the stack.
- Future work should draw a connection between abstentive answers and discourse strategies that prevent (or encourage) POTENTIAL QUESTIONS being adopted as QUDs (Onea, 2016).
  - This includes epistemic indefinites such as *some N or other* and *any old*, and contrasting items like *not just any N*.
- There is a wide landscape of strategic moves available to speakers to alter the direction of discourse, of which abstentive *just* is just one example.

References

Beaver, David I and Brady Z Clark. 2008. *Sense and sensitivity: How focus determines meaning*, vol. 12. John Wiley &; Sons.

Beltrama, Andrea. 2016. Exploring metalinguistic intensification: The case of extreme degree modifiers. In *Proceedings of NELS*, vol. 46, 79–92.

Beltrama, Andrea. 2018. Metalinguistic just and simply: exploring emphatic exclusives. In *Proceedings of SALT 28*.

Cohen, Ariel and Manfred Krifka. 2014. Superlative quantifiers and meta-speech acts. *Linguistics and Philosophy* 37(1):41–90.

Coppock, Elizabeth and David I Beaver. 2013. Principles of the exclusive muddle. *Journal of Semantics* 31(3):371–432.

Farkas, Donka F and Kim B Bruce. 2010. On reacting to assertions and polar questions. *Journal of semantics* 27(1):81–118.

Ginzburg, Jonathan. 1996. Dynamics and the semantics of dialogue. *Seligman, Jerry, & Westerst ahl, Dag (eds), Logic, language and computation* 1.

Green, Georgia M. 1976. Main clause phenomena in subordinate clauses. *Language* 382–397.

Green, Mitchell S. 2000. Illocutionary force and semantic content. *Linguistics and philosophy* 23(5):435–473.

Kratzer, Angelika and Junko Shimoyama. 2002. Indeterminate pronouns: The view from japanese. In *Paper presented at the 3rd Tokyo Conference on Psycholinguistics*.

Krifka, Manfred. 2014. Embedding illocutionary acts. In *Recursion: Complexity in cognition*, 59–87. Springer.

Laparle, Schuyler and Rob Truswell. 2018. The scalar semantics of just. Poster presented at WCCFL 36.

Lee, David. 1987. The semantics of just. *Journal of Pragmatics* 11(3):377–398.

Onea, Edgar. 2016. *Potential questions at the semantics-pragmatics interface*. Brill.

Potts, Christopher. 2005. *The logic of conventional implicatures*. No. 7. Oxford University Press on Demand.

Roberts, Craige. 1996/2012. Information structure: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 5:6–1.

Tonhauser, Judith, David I Beaver, and Judith Degen. 2018. How projective is projective content? gradience in projectivity and at-issueness .

Warstadt, Alex. 2018. Excluding imperatives. Unpublished manuscript.

Wiegand, Mia. 2016. Just and its meanings: Exclusivity and scales in alternative semantics and speech act theory. *Ms. Cornell Univeristy* .

Wiegand, Mia. 2017. Morphosyntax of exclusives and the underspecificity of just. *Proceedings of Berkeley Linguistics Society (BLS)* .

Wiegand, Mia. 2018. Exclusive morphosemantics: Just and covert quantification. In *Proceedings of the west coast conference on formal linguistics (WCCFL)*, vol. 35.