

# “Just” Don’t Ask: Exclusives and Potential Questions<sup>1</sup>

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**Abstract.** The English exclusive *just* is not synonymous with other exclusives such as *only* in sentences like *Sometimes, bad things just/only happen*. I give a new analysis of *just* which explains this and other puzzling readings of *just* observed in earlier work (e.g. Wiegand, 2016; Beltrama, 2018). I argue that *just* excludes alternatives derived from a potential question, or possible future QUD, in the sense of Onea (2016). This new perspective makes it possible to give the first unified account of these non-canonical exclusive readings of *just*, and provides evidence that the semantics of lexical items can be sensitive to possible futures of the discourse.

**Keywords:** exclusives, potential questions, QUD, discourse particles, alternatives, assertability

## 1. Introduction

There is growing evidence that the semantics of certain lexical items makes reference to the structure of discourse. In particular, it has been proposed that the question under discussion (QUD; Roberts, 2012; Ginzburg, 1996) plays a crucial role in the lexical semantics of focus sensitive items like *only* (Beaver and Clark, 2008; Coppock and Beaver, 2013) and discourse particles such as German *überhaupt* (Rojas-Esponda, 2014). While the QUD tracks conversational goals that have been adopted prior in the discourse, relatively less attention paid to the role of possible *future* conversational goals in grammar. Onea (2016) makes progress in this direction by proposing a theory of **potential questions**, intuitively possible future QUDs, and their role in grammar.

In this work, I propose that the English particle *just* makes direct reference to the future of the discourse as part of its conventional meaning in examples like (1). Specifically, I argue that *just* is an exclusive operator over a potential question raised by prejacent, which prevents it being adopted as a QUD. Unlike **strong exclusives** which negate alternatives, I propose that *just* is a **weak exclusive** which declares alternatives unassertable, thereby freeing the speaker from taking a position on the potential question. This explains ignorance readings of *just* as in (1a), where we infer not that there is no reason whatsoever for the lights turning off and on, but that the speaker does not know the reason. I argue further that apparent strong readings of *just* can be derived from this weak exclusive analysis by pragmatic strengthening.

- |     |    |  |                                   |
|-----|----|--|-----------------------------------|
| (1) | a. | The lights in this place just/#only turn off and on.                     | UNEXPLANATORY                     |
|     |    | (Paraphrase: <i>The lights turn off and on for no apparent reason.</i> ) |                                   |
|     | b. | The pumpkin bisque is just/#only delicious!                              | UNCONTRASTIVE                     |
|     |    | (Paraphrase: <i>The pumpkin bisque is extremely delicious.</i> )         |                                   |
|     | c. | Sue is not just/#only a teacher; she’s a math teacher.                   | UNELABORATORY                     |
|     |    | (Paraphrase: <i>Sue is not a general teacher.</i> )                      |                                   |
|     | d. | Betsy just/only eats soup.   | CANONICAL EXCLUSIVE/UNCONJUNCTIVE |
|     |    | (Paraphrase: <i>Betsy eats soup and nothing else.</i> )                  |                                   |

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This account is the first to give a unified analysis *just* that derives the set of **non-canonical exclusive** flavors in (1a)-(1c) not shared with *only*, as well as the canonical exclusive flavor (1d). A growing body of recent work has focused on analyzing these non-canonical flavors (Orenstein, 2015; Beltrama, 2016, 2018; Wiegand, 2016, 2018); however, unlike the present work these prior analyses tended to focus on one or two of the flavors of *just*. Building on these distinctions from prior literature, these flavors can be classified descriptively into four “flavors” based on the kinds of discourse continuations they reject: explanations (1a), contrasts (1b), elaborations (1c), and conjunctions (1d). I argue that these different flavors do not represent different lexical entries of *just*, and are best viewed as excluding different types of potential questions.

These non-canonical readings of *just* present a challenge to standard analyses of exclusives, in which exclusives negate alternatives derived from focus (Rooth, 1985, 1992) or the current QUD which is focus-congruent with the prejacent (Beaver and Clark, 2008; Coppock and Beaver, 2013). While this seems appropriate for *only*, it is inadequate for the non-canonical flavors of *just*. Work on non-canonical exclusives has argued that these items call for new or modified mechanisms for generating alternatives, such as focus on covert content (Orenstein, 2015; Wiegand, 2016, 2018) or a syntactic algorithm following Katzir (2007) for generating metalinguistic alternatives (Beltrama, 2018). The present account is the first to suggest a potential question as the source of alternatives. This approach avoids some bad predictions of previous accounts and suggests a pragmatic explanation for why these particular readings arise.

Finally, the analysis also exposes important unanswered questions in the structure of discourse. Namely, how do conversational participants choose among the landscape of potential questions available as possible future QUDs at a given point in the discourse? The proposed analysis of *just* relies on the speaker being able to anticipate which potential question is most salient. Evidence from the interpretation of sentences involving *just* points to several linguistic and non-linguistic factors that influence these decisions, but ultimately these questions remain open.

The structure of this paper is as follows: Section 2 discusses the primary data to be accounted for. Section 3 defines and motivates potential questions. Section 4 gives the proposed analysis of *just* and discusses the empirical consequences. Section 5 discusses earlier work on *just* and related exclusives in comparison with the present account. Section 6 concludes.

## 2. *Just* Data

*Just* is the most frequent exclusive in English.<sup>2</sup> It is also highly polyfunctional (Lee, 1987, 1991; Aijmer, 2002). This section discusses the various readings of *just* and clarifies the empirical scope of the present paper. First, I characterize the distinction between strong and weak exclusion. Then, I discuss four flavors of *just* that the proposed analysis will unify. Finally, I discuss several flavors of *just* that are *not* covered under the account, and consider arguments for dividing the readings of *just* in this way.

<sup>2</sup>*Just* ranks 66 among the most frequent tokens in the Corpus of Contemporary American English (COCA; Davies, 2009), compared to *only* at 101. From a random sample of 100 instances of *just* in COCA, I estimate that 19% are non-exclusive uses, such as specificatory *just* or the adjective meaning fair. Even after filtering out these instances, *just* is roughly 18% more frequent than *only*.

## 2.1. Strong vs. Weak Exclusion

Sometimes, *just* makes a very clear truth conditional contribution, while at other times it seems to convey something about discourse. Consider (2a), which expresses Aristotle's view that flies appear in rotting fruit entirely without cause. This sentence is false, and spontaneous generation is (rightly) disproved, if an explanation for the prejacents is found. By contrast, Wiegand (2016) notes that the speaker in (2b) does not make a similarly strong claim that the lights turn off and on for no reason whatsoever. Instead, they convey they are ignorant of the cause for lights' turning off and on. While they may suspect a ghost is responsible, they are ultimately unsure.

- (2) a. *Context: Aristotle is explaining his view of spontaneous generation.*  
Flies just appear in rotting fruit. STRONG EXCLUSION  
b. *Context: The speaker is explaining why they think their house may be haunted.*  
The lights just turn off and on. WEAK EXCLUSION

Examples (2a) and (2b) illustrate what I refer to as **strong exclusion** and **weak exclusion**, respectively. One contrast between examples of this type is that strong exclusives cannot be followed up with claims to the effect that some of the relevant alternatives may be true (3a), while, as Wiegand (2016) notes, weak exclusives allow such followups (3b):

- (3) a. Aristotle: Flies just appear in rotting fruit. # They may be hatching from eggs.  
b. The lights just turn off and on. A ghost may be flipping the switch.

In addition to conveying speaker ignorance, weak *just* can also convey reluctance to answer certain questions (4a) or irrelevance of a question (4b):

- (4) a. A: Why did Skip break up with you?  
B: They just did. (*paraphrase: I'd rather not say why.*)  
b. A: I was on my way to the hospital to deliver a baby when the train stopped.  
B: Why did it stop?  
A: It just did. Anyway, I missed the delivery. (*paraphrase: It doesn't matter why.*)

## 2.2. Four Flavors of Exclusive *just*

Prior literature on *just* has identified various sub-types of *just* which can arguably be analyzed as either a weak or strong exclusive. I identify four primary flavors based upon the kind of discourse continuation that is made infelicitous by *just*. While these categories are a convenient descriptive tool, they play no formal role in the analysis, and do not necessarily exhaust the range of interpretations of *just* that can be observed or that follow from the account. Furthermore, as I discuss in Section 4.2, the interpretation of *just* is highly flexible and context sensitive, and so a given example may be consistent with numerous flavors and paraphrases.

**Unexplanatory *just*** In the unexplanatory flavor first identified by Wiegand (2016), *just* conveys that there is no explanation for the prejacents. This meaning is not expressible with *only*:

- (5) a. The lights in this place just/#only turn off and on.  
(*Paraphrase: There is no (known) reason why.*)  
b. Last week, a piano just/#only fell from the sky onto Fifth Avenue.  
(*Paraphrase: There is no (known) reason why.*)

As shown in (6), attempts to follow up unexplanatory *just* with an explanation result in oddness (while without *just*, such a followup is perfectly natural). If strong *just* is intended, these examples result in a contradiction, even if the explanation is modalized, as already shown in (3a). If weak *just* is intended, unmodalized explanations are infelicitous (6), but rather than contradiction, one gets the impression that the speaker has unexpectedly changed their epistemic state or communicative goals: while at first they were unable or unwilling to give an explanation, they have subsequently done so.<sup>3</sup>

(6) # The lights just turn off and on. The wire is frayed.

**Uncontrastive *just*** Lee (1987), Beltrama (2016, 2018), and Wiegand (2016) have observed that *just* can give rise to an intensification effect (7). Again, this reading does not arise with *only*; in fact, when felicitous *only* has an attenuating effect. I refer to this as the **uncontrastive** flavor as it is infelicitous to give a followup that stands in the contrast relation (Asher and Lascarides, 2003) to the prejacent (8). Again, under the strong interpretation of *just*, these followups stand in contradiction to the first assertion. On the weak interpretation, one gets the impression that the speaker was being misleading, or indecisive.

- (7) a. The pumpkin bisque is just/#only delicious. (*paraphrase: It's extremely delicious.*)  
 b. The engine just won't start. (*paraphrase: There is no recourse.*)  
 c. That kind of behavior is just not okay. (*paraphrase: There is no exception.*)
- (8) a. #The pumpkin bisque is just delicious. But there's a little too much garlic.  
 b. #The engine just won't start. But it will if I jump start the battery.  
 c. #That kind of behavior just not okay. But it is if you get permission first.

Morzycki (2011) observes that this flavor of *just* resembles intensifiers like *flat out* and *positively* in that it is able to modify so-called **extreme adjectives** that mark the endpoint of a scale like *delicious*, but cannot modify "ordinary" gradable adjectives like *tasty* (9). Beltrama (2018) notes that this flavor of *just* has a wider syntactic distribution than a intensifier, and felicitously modifies other expressions that mark scalar endpoints, such as modals with universal force (7b).

- (9) #The pumpkin bisque is {just/flat out/positively} tasty.  
 (*intended: The pumpkin bisque is extremely tasty.*)

**Unelaboratory *just*** The **unelaboratory** flavor of *just*, first discussed by Orenstein (2015) in Hebrew, rejects possible elaborations on the prejacent. It is useful to separate the predicative case (10), from other cases (11).

- (10) a. Sue is not just a language teacher; she's a French teacher.  
 b. A: What kind of dog is Fido?  
 B: Fido is just a dog. (*paraphrase: Fido is an ordinary dog, or a mutt.*)

<sup>3</sup>If yet another flavor of *just* is meant, these examples could be felicitous. For instance, suppose the lights are a prop in a play meant to represent flashes of lightning. The props director can felicitously utter (6) to convey that no special action is needed to make the lights to turn off and on because the wire is frayed. However, *just* would no longer be excluding an explanation, but a manner of inducing the lights to turn off and on.

- c. *Context: A teacher explaining the pH scale to high school students.*  
A proton is just a hydrogen atom without an electron.  
(*paraphrase: No more elaborate description is needed to define a proton.*)
- (11) a. I'm not mad at you. I'm just mad. (*paraphrase: I'm not mad at anyone.*)  
b. A: What are you up to?  
B: I'm just reading. (*paraphrase: What I'm reading is not of interest.*)  
c. Usually I have to say "hocus-pocus" to open the gate, but today it just opened.  
(*paraphrase: I didn't have to say "hocus-pocus".*)  
d. Betsy just walked over and shook the president's hand.  
(*paraphrase: Betsy walked over without much ado.*)

This flavor can be identified from the fact that discourse continuations that are elaborations of the prejacent are infelicitous (12). Again, both the strong and weak readings are available in principle. However, for the predicative case, the strong reading is usually implausible. For instance, if Fido is a dog, there must be some more specific type of dog that Fido belongs to. What the speaker seems to be conveying is that Fido is not a special breed of dog, and so whatever breed or mix of breeds Fido is is unknown or irrelevant. By contrast, one naturally gets a strong reading in (11c) that the speaker did not have to say "hocus-pocus".

- (12) a. #Fido is just a dog. In fact, he's a dalmatian.  
b. #Betsy just shook the president's hand. She had to pass a secret service check first.  
c. #I'm just mad. In particular, I'm mad at you.

The non-predicative cases (11) can be distinguished based on whether the excluded elaboration expresses an implicit argument. Examples (11a-11b) involve an implicit argument: if one is mad, one is usually mad *at* something; and one cannot read without reading *something*. Examples (11c-11d) do not involve an implicit argument, but rather a manner or sub-process of an event. For instance, (11b) can be understood to say that Betsy did not seek permission from the president or the secret service before walking over and shaking the president's hand.

**Unconjunctive (Canonical Exclusive) *just*** Of all the flavors of *just*, the **unconjunctive**, or canonical exclusive use, has been the best studied. It shares many properties with *only* (13): it denies alternatives to the prejacent, it (tends to) presuppose its prejacent<sup>4</sup> (Horn, 1969), and it is focus-sensitive (Rooth, 1985).<sup>5</sup>

- (13) a. Betsy just/only eats [CHICKEN NUGGETS]<sup>F</sup>.  
          ⊢Betsy doesn't eat hot dogs. *alternative denial*  
b. Betsy doesn't just/only eat [CHICKEN NUGGETS]<sup>F</sup>. She eats hot dogs!  
          ⊢Betsy eats chicken nuggets. *prejacent presupposition*  
c. Betsy just/only [EATS]<sup>F</sup> chicken nuggets.  
          ⊢Betsy doesn't make chicken nuggets. *focus sensitivity*

<sup>4</sup>The nature or even existence of this presupposition has been widely debated (Horn, 1996; von Stechow and Iatridou, 2007; Roberts, 2011: i.a.). I set aside this issue for reasons of space.

<sup>5</sup>I also set aside some contrasts between *just* and *only* noted by Coppock and Beaver (2013). For instance under negation *just* appears to presuppose its prejacent, while *only* does (e.g. *Betsy is not just/#only an admiral, she's a general.*). Furthermore, *only*, but not *just*, adjoins to DPs (e.g. *Only/#Just Betsy saw the fox.*).

For our purposes, the main point of contrast between unconjunctive *just* and *only* is the availability of weak exclusion. While strong *just* is certainly more commonly observed in connection with this flavor (a fact I have no explanation for), a weak reading is available in (14). In (14B), the response with *just* seems to indicate that the speaker isn't doing anything of relevance besides sitting. By contrast, *only* really resists this weak interpretation: the response comes out as false because the speaker is also biting their finger nails.<sup>6</sup>

(14) Context: *B is sitting on the floor biting their finger nails.*

A: What are you doing?

B: I'm just/#only sitting here.

### 2.3. Meanings *not* to be discussed

Finally, there are several meanings of *just* that I do not attempt to unify under the account. Many of these readings have been discussed in literature on discourse markers (Lee, 1987, 1991; Schiffrin, 1988; Aijmer, 2002; Molina and Romano, 2012: i.a.). The **temporal** usage (15a), expresses that the event denoted by the prejacent occurred immediately before the clause's reference time (Laparle and Truswell, 2018). The **specificatory** or **approximative** usage has been argued to restrict a scalar predicate to only those degrees close to some point on the scale (Laparle and Truswell, 2018; Thomas, 2020). The scalar usage (15e) expresses that the prejacent is low on some relevant scale (Klinedinst, 2004).

- |      |    |   |                             |
|------|----|---|-----------------------------|
| (15) | a. | The train just left.                        | TEMPORAL                    |
|      | b. | The yoga studio is just past the juice bar. | SPECIFICATORY/APPROXIMATIVE |
|      | c. | I know just who to ask for advice.          | SPECIFICATORY/APPROXIMATIVE |
|      | d. | John is just as tall as / taller than Mary. | SPECIFICATORY/APPROXIMATIVE |
|      | e. | Is it strep, or just a viral infection?     | SCALAR                      |

There is reason to suspect that the non-canonical exclusive readings of *just* in (1a)-(1c) form a natural class, to the exclusion of the temporal and approximative readings. English *simply*—unlike *only*—in fact *does* express the full range of non-canonical readings as *just*, but not the temporal or approximative reading. A unified analysis of these non-canonical readings is called for to explain why these meanings and not others are expressed by the same lexical items.

However, I do not wish to suggest that there is no relation whatsoever between these various readings of *just*. It may be possible to argue in the spirit of Klinedinst (2004), Beaver and Clark (2008), and Coppock and Beaver (2013) that all the readings of *just* possess some scalar component as in (15e). Thomas (2020) argues that approximative *just*, like canonical exclusives, denies alternatives stronger than the prejacent. Furthermore, there is an intuitive sense in which the discourse continuations excluded by non-canonical exclusives are more complex than the prejacent. I leave further development of this approach to future work.

<sup>6</sup>Craige Roberts (p.c.) suggests an alternative explanation for the oddness of B': *only* requires a salient alternative set from earlier in the discourse, and in this case none can be found. If we are in a context where A suspects B of doing something naughty, then B' with *only* is improved. This contrast then would reflect the fact that while *only* looks retrospectively for an alternative set, *just* looks prospectively.

### 3. Potential Questions

The proposed analysis of *just* relies on the notion of a potential question, inspired by Onea (2016). Intuitively, potential questions are possible future QUDs which can be raised upon learning a new piece of information. This section defines and motivates this notion.

#### 3.1. Technical Background

First, I will clarify some technical assumptions. I assume a dynamic view of discourse following Stalnaker (1978) and Roberts (2012), in which the discourse context  $C$  is a tuple  $\langle cs, QUD, S, A \rangle$  where  $cs$  is the **context set**,  $QUD$  is the **QUD stack**, and  $S$  and  $A$  are the speaker and addressee respectively. The context set is the largest (nonempty) set of possible worlds consistent with the common beliefs of all the discourse participants, and the QUD stack is a set of questions (explicit or implicit) accepted by the interlocutors and ordered by precedence. The **current QUD**  $CQ$  is the element on top of the stack (i.e. the most recent). In the spirit of Groenendijk and Stokhof (1984), I assume that interrogatives denote a set of alternative nonempty propositions that form a **partition** over the context set and represent the exhaustive answers to the question.<sup>7</sup> Note that Onea (2016) implements his theory of potential questions in inquisitive semantics (Ciardelli et al., 2018). To my knowledge, it is possible with some modifications to adapt my analysis to inquisitive semantics.

#### 3.2. Motivation & Definition

The original motivation for potential questions in Onea's (2016) work comes from more general observations about discourse. In the QUD model of discourse (Roberts, 2012; Ginzburg, 1996), new information is generally seen as addressing the current QUD. However, there are occasions where new information actually *raises* a new question. For example, in the dialogue in (16), B1 addresses question A1, but also raises question A2. By contrast, B1', though relevant to A1, does not raise A2. The notion of a potential question gives a formal explanation for this contrast. The intuition is that A2 is likely to have a positive true answer given B1 but not B1'.

- (16) A1: How is John doing?  
B1: He recently had car accident. / B1': Sue just broke up with him.  
A2: Is he injured? (# in response to B1')

Potential questionhood imposes constraints on future QUDs that are supplementary to constraints already present in QUD theory. In Roberts's (2012) proposal, a new QUD is felicitously askable only if it is relevant to the current QUD, where relevance for questions is defined in (17). Figure 1 illustrates this graphically. For concreteness, if  $Q_1$  is *Who ate what?*, then a relevant followup question  $Q_2$  could be *What did Betsy eat?*. Assuming the context set is consistent with several options for what Betsy ate, then  $Q_2$  meets the condition in (17) because any answer exhaustively describing what Betsy ate would eliminate from consideration at least one exhaustive description of who ate what.

- (17) Question  $Q$  is relevant to the current QUD  $CQ$  iff  $\forall a \in Q \exists a' \in CQ. a \cap a' = \emptyset$

<sup>7</sup>There has been considerable debate over whether the partition view of questions is adequate for questions that are not strongly exhaustive (e.g., Beck and Rullmann, 1999; van Rooy and Schulz, 2004; Xiang, 2016). For simplicity, I restrict the discussion to strongly exhaustive questions.

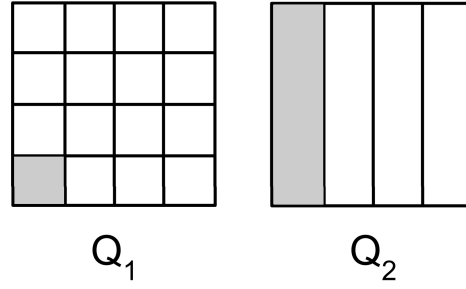


Figure 1: Illustration of question relevance. If the current QUD is  $Q_1$ , then  $Q_2$  is a relevant followup question. For each question, the entire region is the context set, and each smaller region is an alternative in the partition. The gray area represents the universal negative answer.

Returning to example (16), one can see that relevance cannot account for the infelicity of A2 in response to B1'. Question A2 is not ruled out because it is a relevant followup question to A1 according to (17) regardless of the content of B1 or B1'. An exhaustive description of how John is doing includes whether or not he is injured, so either answer to A2 will eliminate at least one answer to A1. The problem is not that relevance is formulated incorrectly (intuitively, to know whether John is injured *is* relevant to how John is doing), but rather that it is not a sufficient condition for felicity.

The solution in this case is to add the constraint that a new QUD must be a **potential question** in the discourse context. In (18) I adapt Onea's (2016) definition of a potential question. Indeed, question A2 in (16) is a potential question following B1 because upon learning that John recently had an accident, it is highly likely that he is injured, but not so upon learning he was recently broken up with. In this dialogue, we say that B1, but not B1', **licenses** A2 as a potential question (18b), because updating the context set with B1 results in A2 becoming a potential question.

- (18) a. **Definition: Potential question**  
 Question  $Q$  is a potential question in context  $C$  iff (a)  $Q$  is sufficiently likely to have a positive true answer given  $cs_C$ , and  $cs_C$  does not entail an answer to  $Q$ , and (b)  $Q$  is not resolved by  $cs_C$  or an element of  $QUD_C$ . This is written  $PQ_C(Q)$ .
- b. **Definition: Licensing a potential question**  
 Proposition  $p$  licenses  $Q$  as a potential question in  $C$  iff  $PQ_{C'}(Q)$ , but not  $PQ_C(Q)$ , where  $C'$  is the result of updating  $C$  with  $p$ . This is written  $LICENSE_C(p, Q)$ .

These definitions also apply to *wh*-questions, in which case a positive answer is any exhaustive answer besides the universal negative answer. Consider example (19), illustrated in Figure 2. Although both question A2 and A2' are relevant to the initial QUD, B's response licenses only A2. This is because upon learning that the cookies disappeared, it is likely that someone ate them, but not that someone hid them. This is clear from Figure 2: The size of the white region represents the probability that the question has a positive true answer, and one can see a marked difference between questions A2 and A2' in the size of this region. Of course, this presupposes an ordinary context. If participant A lives with several mischievous children who tend to hide her possessions, then the size of the white region in A2' would be much larger, and as predicted the question would be felicitous.



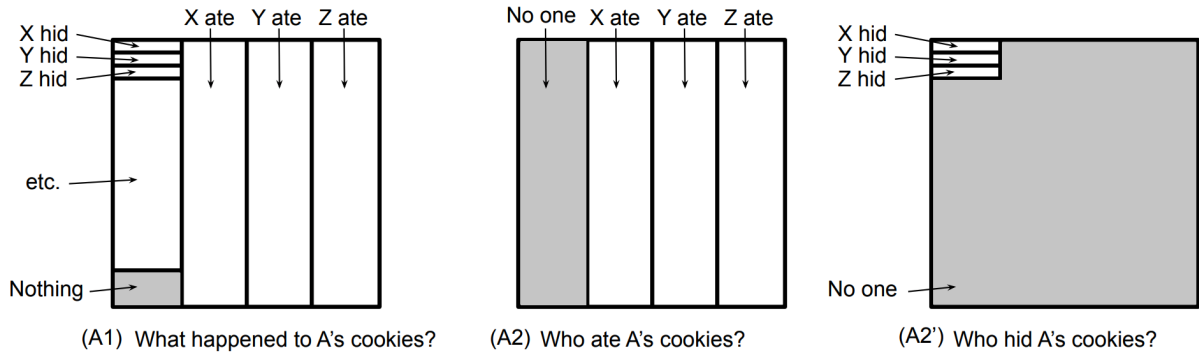


Figure 2: Illustration of the potential question constraint. The area contained within a cell of the partition is proportional to the probability of the actual world belonging to the cell. The question on the left is the current QUD, and the other two questions are both relevant. However, the question on the right fails to be a potential question due to the high probability of the universal negative answer (the gray area).

- (19)      A1: What happened to the cookies I was saving for the holiday party?  
             B: They're not in the cabinet anymore.  
             A2: Who ate them? / A2': # Who hid them?

### 3.2.1. Potential Questionhood vs. Existential Presupposition

An alternative hypothesis to explain the badness of the response in (19) is that an existential presupposition of the question is not satisfied in the context. I reject this hypothesis for two main reasons. First, presupposition failure cannot explain the oddness of the followup polar question in (16) in response to B1', since a polar question clearly cannot presuppose its positive answer. Second, appealing to presupposition failure to explain the badness of (19A2') should equally predict badness in the case of (19A2), since the speaker's beliefs do not incontrovertibly entail the existential proposition.

I side with Groenendijk and Stokhof (1984), Onea (2016), and many others in the view that *wh*-questions do not have an existential presupposition by virtue of their semantics.<sup>8</sup> In support of this view, Groenendijk and Stokhof (1984) argue that a universal negative answer is a felicitous response to a *wh*-question (20B), and Onea (2016) provides further evidence that such responses do not behave like rejections of a presupposition (20B').

- (20)      A: Who is coming with me?  
             B: Nobody. / B': # Hey wait a minute, nobody's going with you!

Instead, Onea's (2016) theory gives a pragmatic explanation for the strong existential inference that is perceived in many cases. In order for a question to be a potential question, the existential proposition must be sufficiently likely to be true. Hence, if an agent asked the question, they must assign high probability to the existential proposition. This view builds on prior work in inquisitive semantics that argues that positive answers of a question have a special "highlighted" status (Roelofsen and Van Gool, 2010; Roelofsen and Farkas, 2015). I import the notion of

<sup>8</sup>See Hamblin (1973), Dayal (1996), AnderBois (2014), and others for an opposing view.

highlighted alternatives into Groenendijk and Stokhof (1984) partition semantics for questions, using  $\mathcal{H}(Q)$  to denote  $Q$ 's highlighted alternatives.<sup>9</sup>

### 3.3. Raising Potential Questions

Even if a question is a potential question in some context, it may still be a bad candidate for a new QUD. For example, (16B1) licenses all the questions in (21), and each one is relevant to the original QUD *How is John doing?* according to (17). However most speakers in a similar dialogue would be highly unlikely to ask any of these questions.

(21) Does he have insurance? / How fast was he going? / Did he mess up his hair?

While a new piece of information can license many potential questions, for a given participant and discourse context it makes sense to say that it only **raises** one question: the question that agent is most inclined to ask (22). I follow Onea (2016: p. 135) in assuming that potential questions can be ordered by salience (though I assume a total order).

(22) **Definition: Raising a Potential Question**

Potential question  $Q$  is raised by proposition  $p$  in context  $C$  only if it is the highest ranked  $Q$  such that  $\text{LICENSE}_C(p, Q)$  according to total order  $<_A$  determined by salience to agent  $A$ . This is written  $\text{RAISE}_C(p, Q, A)$ .

I consider it uncontroversial that a given agent has the reasoning necessary to arrive at a unique most salient potential question. Otherwise, we would be unable to choose a followup question in discourse. However, we are still far from a theory of salience, and such a theory will likely lie at the interface of pragmatics and psychology (McCready, 2012; Onea, 2016) and involve various interrelated factors. Nonetheless, there are still some meaningful linguistic generalizations to be made about salience. McCready (2012) suggests a notion of salience for QUDs based on van Rooy's (2003) insight that questions can be ordered by **utility**. Onea (2016: p. 136) identifies certain indefinites and implicit arguments as types of linguistic content that tend to raise elaboration or specificational questions. I leave a more complete analysis of salience and raising potential questions to future work and subsequently take these notions as given.

## 4. Analyzing *just*

The proposed lexical entry for *just* is given in (23). A schematic comparison of *just* and *only* is given in Table 1. I propose that *just*, like other exclusive operators such as *only*, rejects a set of propositional alternatives to the prejacent. However, it differs from *only* in two ways: First, the set of alternatives to the prejacent, which I call  $\text{PQ-ALT}_C(p)$  (23b), comes from the potential

<sup>9</sup>A formal definition of the partition semantics for questions and highlighting is as follows: If  $Q$  is an interrogative with LF  $wh_1, \dots, wh_n(\beta)$ , where  $wh_i$  is the  $i^{\text{th}}$  wh-word in  $Q$ ,  $D(wh_i)$  is the domain of  $wh_i$  (e.g.  $D(who)$  is the set of humans), and  $\beta$  is the intension of an  $n$ -ary relation ( $n \geq 0$ ), in context set  $c$ , then:

- $\mathcal{R}_Q = \lambda w \lambda w' [\forall x_1 \in D(wh_1), \dots, \forall x_n \in D(wh_n) [\beta^w(x_1, \dots, x_n) \leftrightarrow \beta^{w'}(x_1, \dots, x_n)]]$
- $\llbracket Q \rrbracket^c = \{ \{ w \in c \mid \mathcal{R}_Q(w, w') \} \mid w' \in c \}$
- $Q$ 's highlighted alternatives  $\mathcal{H}(Q) := \{ a \in \llbracket Q \rrbracket^c \mid \exists x_1 \in D(wh_1), \dots, \exists x_n \in D(wh_n) \forall w \in a [\beta^w(x_1, \dots, x_n)] \}$

	<i>just</i>	<i>only</i>
<b>Argument</b>	Prejacent proposition $p$	Prejacent proposition $p$
<b>Presupposition</b>	$p$ is true	$p$ is true
<b>Alternatives</b>	The potential question raised by $p$	The current QUD, focus congruent to $p$
<b>Exclusion</b>	All positive (highlighted) alternatives to the PQ are unassertable	All alternatives not entailed by $p$ are false

Table 1: Schematic analyses of *just* and *only*.

question raised by  $p$  in the context with respect to the addressee  $A_C$ .<sup>10</sup> Second, the alternatives are rejected by virtue of being unassertable for the speaker  $S_C$ , rather than false.

- (23) a.  $\llbracket just \rrbracket^C = \lambda p \lambda w : p(w). \forall a \in \text{PQ-ALT}_C(p) [\neg \text{ASSERTABLE}(a, S_C, w)]$   
b.  $\text{PQ-ALT}_C(p) := \mathcal{H}(\iota Q[\text{RAISE}_C(p, Q, A_C)])$

The notion of assertability (23a) is defined in (24) as a conjunction of conditions that a proposition must satisfy to be felicitous and rational to assert. Conditions (a) and (b) can be derived from Grice’s (1975) maxims of quality and relation, respectively. The third condition is not entirely Gricean, because it comes into play in some uncooperative discourses, such as a police interrogation, where a participant may refuse to make an assertion purely out of self-interest. Thus, *just* conveys that at least one of these conditions is failed by each of the alternatives in the actual world.<sup>11</sup> As noted in Section 2.1, weak *just* can be used to express that the speaker does not know whether the alternatives are true, considers them irrelevant, or is unwilling to assert them. With sufficient context, the listener can strengthen the claim that an alternative is unassertable to the claim that one particular condition in (24) fails to be met.

(24) **Definition: Assertability**

Proposition  $p$  is assertable for agent  $A$  in  $w$  iff: (a)  $S$  believes in  $w$  that  $p$  is true, (b)  $S$  considers  $p$  relevant to the other conversational participants in  $w$ , and (c)  $S$  is willing to be publicly committed to believing  $p$  in  $w$ . This is written  $\text{ASSERTABLE}(a, S_C, w)$ .

Recall that *just* also has a strong reading, as in (2a). I suggest that this reading is pragmatically derived from the weak exclusive lexical entry in (23) when the addressee assumes the speaker is opinionated about the potential question. This is completely parallel to the opinionatedness assumption that has been argued to strengthen weak (or primary) implicatures (Sauerland, 2004). For example, in (2a) the strong reading arises because we assume that Aristotle, as a philosopher seeking to give an explanation, has an opinion about the cause of fruit flies appearing. Since he considers no cause to be assertable (and the relevance and willingness conditions on assertability are met), he must believe there is no cause whatsoever.

Note that I have posited a presupposition for *just* in (23). Non-canonical *just* triggers a soft

<sup>10</sup>I propose that *just* excludes only highlighted alternatives of the question for two reasons. This is the smallest set of alternatives that needs to be excluded to render the potential question unaskable. Furthermore, excluding all the alternatives in a partition results in a contradiction.

<sup>11</sup>One might want  $p$ ’s assertability to be a property of an information state rather than a world. This is possible in a framework like inquisitive semantics (Ciardelli et al., 2018) or the commitment space model of Cohen and Krifka (2014) where the type of the discourse context is lifted to be a *set* of information states or something similar. I leave such an analysis as a possibility for future work.

presupposition that the prejacent is true (25a), but this is often absent (25b). Since it is still debated whether soft presuppositions are semantically encoded (e.g. Abusch, 2010), I leave open the possibility that the prejacent inference arises by other means.

- (25) a. John didn't just leave class. He notified the professor first.  $\leadsto$  John left class.  
 b. Does the landlord just show up, or does he stay away?  $\nrightarrow$  The landlord shows up.

#### 4.1. Unifying Non-Canonical Exclusion

We can now show how the various flavors of *just* introduced in (1), repeated in (26), are derived from the lexical entry for *just* in (23). As discussed in Section 2, each flavor prevents discourse continuations that stand in certain rhetorical relations to the prejacent. This follows under the analysis from the fact that different rhetorical relations can be seen as different types of QUDs (see Onea, 2016: §8.3). Examples of each kind of excluded question are given in (27).

- (26) a. The lights in this place just turn off and on. UNEXPLANATORY  
 b. The pumpkin bisque is just delicious! UNCONTRASTIVE  
 c. Sue is not just a teacher; she's a math teacher. UNELABORATORY  
 d. Betsy just eats soup. UNCONJUNCTIVE
- (27) a.  $PQ-ALT_c(\text{The lights turn off and on}[TLTOAO]) = \mathcal{H}(\llbracket \text{Why do TLTOAO?} \rrbracket)$   
 $= \{TLTOAO \text{ because I flip the switch, TLTOAO because the wire is frayed, ...}\}$   
 b.  $PQ-ALT_c(\text{The pumpkin bisque is delicious}[TPBID]) = \mathcal{H}(\llbracket \text{...But what?} \rrbracket)$   
 $= \{TPBID \text{ but a little salty, TPBID but too garlicky, ...}\}$   
 c.  $PQ-ALT_c(\text{Sue is a teacher}) = \mathcal{H}(\llbracket \text{What kind of teacher is Sue?} \rrbracket)$   
 $= \{Sue \text{ is a math teacher, Sue is a history teacher, ...}\}$   
 d.  $PQ-ALT_c(\text{Betsy eats soup}) = \mathcal{H}(\llbracket \text{In addition to soup, what does Betsy eat?} \rrbracket)$   
 $= \{In \text{ addition to soup Betsy eats fries, In addition to soup Betsy eats chips, ...}\}$

First, the unexplanatory flavor in (26a) arises when the prejacent of *just* raises an **explanation question**, as in (27a). This potential question is licensed by the prejacent (see definition (18b)) because upon learning that the lights turn off and on—but *not sooner*—it is highly likely that there is some explanation for the flickering. It is raised (see definition (22)) in contexts where this is the most salient potential question. The fact that this reading is easily accessible in a relatively neutral context follows from the assumption that explanation questions are among the kinds of potential questions that can be maximally salient by default (Onea, 2016: p. 136). In this example, *just* contributes that each possible explanation is unassertable, most likely because the speaker lacks sufficient evidence.

Second, the uncontrastive flavor in (26b) arises when the prejacent raises a **contrast question**, as in (27b). This explains the intensification effect associated with this flavor. The reasoning follows Beltrama's (2018) analysis in many respects (though see Section 5.3 for more discussion of Beltrama's analysis). Even if the pumpkin bisque is slightly less than delicious, it can be described as *delicious* without violating the maxim of quality, once we consider the pragmatic halo around *delicious* (Lasersohn, 1999). Rational speakers may make such slightly exaggerated claims in response to Gricean pressures to keep utterances brief. One consequence of this behavior is that the addressee may wrongly infer that the speaker is exaggerating when making a justified strong claim. The contribution of *just* is that no contrasting statement is assertable,

perhaps because they are all false, and thus the speaker is not exaggerating. In fact as the competitor's question in (28) illustrates, the stronger the claim, the more likely a contrast question is to be raised. This explains why uncontrastive *just* is available primarily with extreme adjectives (9): contrast questions are maximally salient primarily in connection with extreme claims.

- (28) *Context: A judge for a cooking competition is reviewing a competitor's meal.*  
 Judge: The pumpkin bisque is delicious. The texture is silky. The spices are spot on.  
 Competitor: But what?  
 Judge: Well, it's a little too salty.

Third, the unelaboratory flavor of *just* in (26c) arises when the prejacent raises an **elaboration question**, as in (27c). Upon learning that Sue is a teacher, it is natural to wonder what kind of teacher she is. In this example, the prejacent attributes to Sue the property of being a teacher, and the elaboration question contains various (subsecutive) modifications of this property. Interestingly, *just* is embedded under negation,<sup>12</sup> so rather than conveying that no modification is assertable, the first clause of (26c) conveys that there *is* an assertable alternative to the potential question, which the second clause supplies. In other cases of unelaboratory *just*, such as (11a), the presence of an implicit argument raises a specificational question about the referent of the argument. This supports the view that that implicit arguments make such potential questions highly salient by default (Onea, 2016: p. 136).

Finally, the unconjunctive—or canonical exclusive—flavor of *just* can be derived in cases where the prejacent raises a **conjunction question**, as in (27c). I assume that such questions have an additive presupposition, in this case that Betsy eats soup. The fact that Betsy eats soup licenses this potential question because prior to learning this fact, each of the positive answers to (27c) has probability 0 due to the failure to satisfy the additive presupposition. If we assume that the QUD concerns what Betsy eats, then this is the most salient potential question. Recall that according to Coppock and Beaver (2013), *only* excludes alternatives from the current QUD. Arguably, the reason that this flavor of *just* is equivalent to the one arising from *only* is that the potential conjunction question is actually equivalent to the QUD after updating the context set with the prejacent.

#### 4.2. Context Sensitivity and Salience

The account of *just* in (23) predicts a high degree of context sensitivity due to the claim that *just* excludes the potential question with the greatest contextual salience. Rather than a being a limitation, I argue that this is a necessary feature of an adequate account of *just*. As explained at the top of Section 2.2, the four categories of *just*'s meanings I propose are intended heuristically, and there are instances where *just* excludes a contextually salient potential question that is not easily categorized.

For example, consider example (11c), repeated in (29). In this sentence *just* excludes a single alternative, namely the positive answer to the question *Did the speaker have to say "hocus-pocus" when opening the gate?*. This alternative set is highly specific to the context and highly salient, hence this reading is only predicted if *just* retrieves its alternative set from the context.

<sup>12</sup>Nothing in the lexical entry in (23) prevents *just* from appearing in embedded positions. However, Beltrama (2018) observes specific examples in which *just* do not embed under negation (e.g. #*The soup is not just delicious*). I leave a detailed investigation of the embeddability of *just* to future work.

Account	Flavor	Alternative source	Weak/Strong
Coppock & Beaver (2013)	Unconjunctive	QUD-based alts	Strong
Orenstein (2015)	Unelaboratory	Roothian “internal” alts	Strong
Wiegand (2016, 2018)	Unexplanatory	Roothian “internal” alts	Modal alts
Beltrama (2016, 2018)	Unelaboratory	Metalinguistic alts	Weak
<i>Present account</i>	<i>All of the above</i>	<i>Potential Question</i>	<i>Strengthening</i>

Table 2: Comparison of accounts of *just* and other non-canonical exclusives.

- (29) Usually I have to say “hocus-pocus” to open the gate. But today it just opened.  
 $PQ-ALT_c(The\ gate\ opened) = \mathcal{H}(\llbracket Did\ S\ say\ “hocus-pocus”\ to\ open\ the\ gate? \rrbracket)$   
 $= \{S\ said\ “hocus\ pocus”\ to\ open\ the\ gate.\}$

Similarly, the interpretation of *just* can be altered based on other factors that determine the salience ordering over potential questions, such as consistency and relevance to the participants’ goals. These factors can be sufficient to override the default interpretation of *just*. For example, the string *I just love him* is most naturally interpreted with uncontrastive *just* (i.e. with an intensification reading). However, in (30), it carries an unexplanatory reading, because the uncontrastive reading would be inconsistent with the prior context. Similarly, the string *the lights just turn off and on* (1a) most naturally had an unexplanatory reading in a neutral context. However in (31), we instead get the reading that no additional action is necessary to operate the lights. This is because the potential question of how the light is operated is relevant to the QUD, while the potential explanation question is not.

- (30) I know Justin Bieber is a bit of a jerk and a mediocre singer. I just love him.  
*Paraphrase: I can’t explain why I love him.*
- (31) *Context: The props director for a play is explaining to a stage technician how to use a special light that creates the effect of lightning flashes.*  
 Flip the switch, and the lights just turn off and on.

## 5. Comparison to Previous Work

The present analysis of *just* builds on details from several prior accounts of *just* and other non-canonical exclusives. It also diverges in some key respects, and in some cases it addresses empirical and theoretical problems of previous accounts. A summary of this related work is given in Table 2. I single out several points of divergence. First, earlier work tends to cover only canonical readings or to focus mainly on a single non-canonical flavor. While some of these works acknowledge other non-canonical flavors, there has been little dedicated attempt at a unified analysis. Second, accounts propose a wide variety of mechanisms for generating the of alternatives excluded by *just*. Finally, these works differ on whether they assign a strong or a weak reading to *just* and on how the weak reading is derived (if at all).

### 5.1. QUD-based Alternatives

Beaver and Clark (2008) and Coppock and Beaver (2013) develop a theory of exclusive particles in which alternatives come from the current QUD. Coppock and Beaver give a very general analysis for a wide array of exclusives in English, including *just*, but mostly fail to mention non-canonical readings of *just*. Despite the similarities between the QUD and potential questions, this account does not predict non-canonical readings of *just*, as the alternative set excluded by *just* is not generally the current QUD. For example, consider the dialogue in (32). A's question acts as the QUD at the time of B's utterance with *just*, while the excluded alternatives come from another question: *Why do the lights turn off and on?*. This question was not even entertainable as a QUD because A was unaware that the lights were turning off.

- (32) A: Why are you afraid of your apartment?  
B: The lights just turn off and on.

### 5.2. Focus Alternatives & Covert Modifiers

Orenstein (2015) and Wiegand (2016, 2018) give accounts of unelaboratory and unexplanatory exclusion (respectively) in which excluded alternatives are focus-generated.<sup>13</sup> Their analyses derive virtually the same alternative sets for these flavors as the present account, as in (27a) and (27c). However, they follow Rooth (1985, 1992) in supposing that the alternatives are generated by replacing a focused element in the prejacent with other semantic values of the same type. The technical puzzle for this approach is that the alternatives for these flavors vary by *adding* some content to the prejacent, not by replacement. To address this, they both propose that the focused element in the prejacent is a covert modifier with a trivial semantic contribution. For example, in the case of unelaboratory *just* (33), a covert nominal modifier is focused in the prejacent (covert content is crossed out). The modifier itself is trivial, i.e. it returns true for every individual, so it does not alter the ordinary meaning of prejacent. However, the replacements of the modifier are not trivial, giving the set of elaborations on the prejacent. Similarly, Wiegand (2016) posits a covert cause modifier to account for unexplanatory *just*.

- (33) a.  $p = \text{Sue is a } [\text{MOD}]_{\neq} \text{ teacher.}$   
b.  $\llbracket p \rrbracket^f = \{ \text{Sue is a } Q \text{ teacher} \mid Q \in D_{\langle e, t \rangle} \} = \{ \text{Sue is a math teacher, ...} \}$   
c.  $\llbracket [\text{MOD}] \rrbracket^o = \lambda x_e. \top$

Although this account generates the same alternative sets as the potential question account, it does not make the same predictions. In fact, it wrongly predicts that *only* should give rise to the same set of non-canonical readings as *just*. The reason is that both *only* and *just* exclude focus alternatives in this view. If alternatives generated by focus on covert modifiers can be excluded by *just*, there is nothing that should stop *only* from excluding these alternative as well.<sup>14</sup> Another critique, albeit a purely theoretical one, is that it is not independently motivated to suppose that covert modifiers of this kind exist in the syntax.<sup>15</sup> In principle, such modifiers

<sup>13</sup>Orenstein (2015) does not analyze *just*, but rather the Hebrew exclusive *stam*.

<sup>14</sup>In subsequent work, Wiegand (2018) addresses this problem by proposing two mechanisms for introducing alternatives: one is focus in the sense of Rooth (1992), and one is a formally similar mechanism that is triggered by covert modifiers. Accordingly, *only* selects for the first kind of alternatives, while *just* selects for the second. While this proposal avoids the problem of the original account, the solution is ad hoc.

<sup>15</sup>Barker (2013) suggests that sprouting as in *Sue is a teacher, but I don't know what kind* can be analyzed by

should be generally available even in sentences without *just*, but with no observable effect. All else being equal, we should prefer an account that does not posit the existence of covert content.

The potential question analysis avoids both pitfalls. The unavailability of non-canonical readings with *only* is easy to explain: *only* gets its alternatives from the QUD. And the “extra” material in the alternatives does not arise arbitrarily, but from pragmatic reasoning about future developments in the discourse and the independently motivated notion of a potential question.

### 5.3. Metalinguistic Alternatives

Beltrama (2018) gives an account that is focused on deriving the intensification effect of uncontrastive *just* in connection with extreme adjectives, as in example (26b). Beltrama’s account resembles the present one in several respects. First, it argues that *just* (and *simply*) express that certain alternatives to the prejacent are unassertable. Second, it derives intensification by restricting the excluded alternatives to versions of the prejacent with the addition of some contrasting piece of information. However, Beltrama does not suggest that *just*’s alternatives come from a potential questions, but rather argues that alternatives to *just* are generated by a syntactic algorithm following Katzir (2007) which may insert, delete, contract, or replace constituents in the syntactic structure of the prejacent. Applying this algorithm to the prejacent  $p$  gives the **metalinguistic alternatives** of the prejacent (denoted  $Alt_{ML}(p)$ ). These alternatives can be ordered by syntactic complexity as in (34a), and Beltrama uses this ordering to define assertability, also following Katzir (2007), in (34b).

- (34) a. **Structural Complexity** Let  $\phi$ ,  $\psi$  be parse trees. If we can transform  $\phi$  into  $\psi$  by a finite series of deletions, contractions, and replacements of constituents in  $\phi$  [...], we will write  $\psi \leq_{Com} \phi$ . (Beltrama, 2018: p. 9)
- b. **Assertability** A proposition  $p$  is assertable if there is no metalinguistic alternative  $q$  such that  $q$  is true and supported by evidence, and  $q <_{Com} p$  or  $q \subset p$ , i.e.  $q$  is less complex or more informative than  $p$ ] (based on Beltrama, 2018: p. 12)

Finally, the proposed contribution of *just* is given in (35). This lexical entry says that any metalinguistic alternative to the prejacent that is assertable must also be at least as simple. This rules out from being assertable versions of the prejacent obtained by substituting the metalinguistic alternatives in (36). The crucial effect of this contribution is to let the addressee know that the current situation is not one where the speaker is exaggerating slightly in calling the soup delicious. In such a situation, the metalinguistic alternatives *are* assertable despite being more complex than the prejacent, because they are more informative. Note that the prejacent is still assertable because it is simpler, and true within the pragmatic halo of *delicious*. Thus the source of the intensification effect is much the same as in the present account.

$$(35) \quad \llbracket just_{Beltrama} \rrbracket = \lambda \alpha : \forall \beta \in Alt_{ML}(\alpha) [\text{ASSERTABLE}(\phi[\beta/\alpha]) \rightarrow \beta \leq_{Com} \alpha]$$

$$(36) \quad \alpha = \text{delicious}; Alt_{ML}(\alpha) = \{\text{delicious but a little salty}, \text{delicious but too garlicky}, \dots\}$$

One issue left unaddressed in the metalinguistic account is how to restrict the alternatives such that they all address the same question. Adding relevance to the QUD as another constraint on assertability solves the problem for uncontrastive *just* if we assume the QUD for (26b)

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proposing a covert modifier in the antecedent clause. However, other analyses do not propose covert modifiers (Chung et al., 1995), and even rely on notions closely related to potential questions (AnderBois, 2014).



was, for instance, *How tasty is the pumpkin bisque?*. However, if one wants to extend the account to capture other non-canonical flavors of *just*, then the QUD cannot be the source of the alternatives, as discussed in Section 5.1 in connection to Beaver and Clark's (2008) and Coppock and Beaver's (2013) QUD-based alternatives approach.

## 6. Conclusion

This paper gives an account that unifies several meanings of *just*. The account has implications for semantic theories of exclusives, which have developed considerably with major recent contributions from Beaver and Clark (2008) and Coppock and Beaver (2013). Despite these advances, our understanding of non-canonical exclusives has lagged behind. The present account shows that non-canonical exclusive flavors studied by Orenstein (2015), Wiegand (2016), and Beltrama (2018) can be unified by adopting potential questions as the mechanism for generating alternatives.

The account also proposes a distinction between strong and weak exclusion inspired by Wiegand and Beltrama. While a strong exclusive declares alternatives to be false, a weak exclusive declares them to be merely unassertable. This distinction parallels the distinction primary and secondary implicatures in the literature on scalar implicatures and exhaustivity inferences (Sauerland, 2004), and we can build on insights from this literature to derive strong exclusion from weak exclusion.

Finally, *just* likely fits into a larger class of phenomena that manipulating possible future discourse developments through reference to a potential question. The claim that lexical items exist whose primary purpose it is to modify the future of discourse is a relatively new idea, though one which is advocated by Onea (2016) as well. It is undeniable that humans make plans about the future of a discourse, and also that disagreements and misunderstandings about these plans arise on a regular basis. Thus, it should not be surprising that natural languages include functional elements devoted to this kind of planning. Further exploration of other elements sensitive to potential questions can deepen our understanding of the semantics-pragmatics interface and how language provides tools that help interlocutors shape discourse structure to suit their needs.

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