# Social inferences from the use of *just* as an exclusive particle

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**Abstract.** Recent work has begun to investigate the interaction between semantics and social meaning. This study contributes to that line of inquiry by investigating how particular social meanings that are popularly believed to arise from the English discourse particle *just* are related to the conventional semantic meaning of *just*. In addition to proposing an inferential process by which the social meanings associated with *just* arise, this paper reports the results of a social perception experiment designed to test whether those social inferences arise when *just* is used in particular speech acts and whether they depend on the speaker's gender and level of authority relative to the addressee. The use of *just* was found to significantly increase the perceived insecurity of men but not of women. This suggests that listeners may more strongly perceive speaker qualities that stereotypes cause them not to expect.

**Keywords.** social meaning; exclusives; gender; English

**1. Introduction.** In popular discourse, the English particle *just* is said to convey deference, insecurity, and lack of confidence. For example, the word *just* in (1) seems to soften the request being made, making the speaker sound polite and deferential. One might infer from this that speaker lacks the confidence to make a more direct request.

(1) I was **just** wondering if you could pick up the donuts for tomorrow's meeting.

These social meanings appear to be related to the minimizing effect of *just* as an exclusive particle: (1) conveys that the speaker is asking no more of the addressee than that the addressee pick up the donuts, and that this is not a large imposition. The social meanings of *just* therefore seem to be a consequence of the semantic content of *just* in particular contexts. This kind of interaction between semantic and social meaning has until recently received little attention in the literature.

This paper makes two contributions: First, it proposes an analysis of the inferential process that yields the social meaning of *just*. Second, it reports the results of an experiment designed to measure the extent to which three contextual variables—the speaker's gender, the speaker's level of authority relative to the addressee, and whether the speaker is understood to be making an imposition on the addressee—affect social inferences associated with *just*. The primary finding of the experimental portion of the study is that the use of *just* increases the perceived insecurity of men but not of women, which may have implications for our understanding of how stereotypes influence sociolinguistic perception.

In Section 2, I summarize the metalinguistic commentary on *just* that is circulating in popular discourse. Then, in Section 3 summarize recent work done on the interaction between semantic and social meaning, a line of inquiry that this study contributes to. I then analyze the social inferences associated with *just* in Section 4 and lay out three hypotheses about how con-

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textual factors bear on those inferences. Section 5 describes the experiment used to test those hypotheses, and Section 6 presents the results.

**2. Metalinguistic commentary on *just*.** In 2015, former Google executive Ellen Petry Leanse penned a blog post advising women to stop using the word *just* in constructions like "I just wanted to check in on…", "Just wondering if you'd decided between…", "If you can just give me an answer, then…", and "I'm just following up on…" She writes,

> I started paying attention, at work and beyond. It didn't take long to sense something I hadn't noticed before: women used "just" a lot more often than men. … I began to notice that "just" wasn't about being polite: It was a subtle message of subordination, of deference. Sometimes it was self-effacing. Sometimes even duplicitous. As I started listening, I realized that striking it from a phrase almost always clarified and strengthened the message.[1]

Many internet commentators have concurred, claiming that just "shrinks your power"[2], "undercut[s] assertive expression and reveal[s] a lack of confidence"[3], and "positions you as a constant subordinate."[4]

Other commentators have taken issue with Leanse's advice. One relates a story of a female friend who feels that she has to avoid asserting herself when speaking to her male employees, who dislike taking orders from a woman. She uses *just* to soften her requests in order to avoid angering them:

> It repulses and enrages Sandy, but she never speaks to her male employees as their boss, or gives them direct instructions. Instead, when she picks up her walkie-talkie to relay a request, she turns into a damsel in distress who is sorry to be such a bother, but she would be 'eva so grateful if they would just take a peek at the toilet in 11B. … [She] has to always sound as if she is making a suggestion, or as if they are doing her a favor.[5]

On this commentator's view, it is unfair of Leanse to blame women for needing to use *just* in this way. She goes on to claim that *just* actually conveys humility and non-aggression, qualities that should be encouraged, especially in men holding positions of power:

> As Leanse says, the word "just" is a word of permission. But it is also a word of reassurance. It says, "Hey, I am not here because I want to brow beat you. All that I need is to know when that memo will be ready so that I can plan accordingly." ... Seeking permission, telegraphing non-aggression, displaying humility—these are all things that men, especially those in corporate leadership positions, should be learning. Female styles of communication are not inherently or even practically wrong or inappropriate.

[1] https://www.linkedin.com/pulse/just-say-ellen-petry-leanse
[2] https://www.taramohr.com/communication-tips/8-ways-women-undermine-themselves-with-their-words/
[3] https://archive.attn.com/stories/4139/why-you-should-stop-saying-just
[4] https://theeverygirl.com/7-phrases-to-stop-saying-at-work/
[5] http://www.rolereboot.org/life/details/2015-07-in-defense-of-women-saying-just-and-sorry-in-the-workplace/

Notwithstanding their disagreement about the fairness of Leanse's prescription against *just*, many internet commentators seem to agree that women use *just* more than men do and that it signals an array of related speaker qualities: politeness, deference, insecurity, non-aggression, humility, etc.

The aim of this project is to (1) develop an understanding of how the semantics of *just* interacts with context to produce these inferences and (2) to test experimentally whether listeners actually draw these inferences in particular kinds of contexts. Setting aside the issue of whether women actually use *just* more, commentary of the kind above raises the question of whether expectations about women's speech might influence the perception of their use of *just*. If stereotypes cause listeners to expect women, but not men, to display the qualities that *just* is associated with, could that expectation cause the strength of social inferences triggered by *just* to vary depending on the gender of the speaker? Similarly, could expectations about the speech of people in positions of authority (e.g. the female supervisor above) cause the strength of those inferences to vary depending on whether the speaker has authority over the addressee? The type of speech act *just* occurs in may also affect its social meaning: The examples above seem to involve utterances that make some sort of imposition on the addressee, such as requests. Do the social meanings in question fail to arise in utterances that do not make an imposition?

**3. The socio-semantics interface.** Sociolinguistic research has primarily focused on phonetic or lexical alternations with a fixed semantics (see e.g. Labov 1966, Trudgill 1974, Milroy 1980, Eckert 2000, Zhang 2005, among many others). Studies of social meaning have focused on how such variables index characteristics of speakers (see Eckert 2008).

Recent work has begun to investigate the interaction between semantics and social meaning. Beltrama & Staum Casasanto (2017) showed that indexical meaning can be constrained by semantic variables. They found that the intensifier *totally* can index youth, solidarity, and lack of status, but only when it targets a scale of speaker commitment, conveying that a speaker is maximally committed to the content of the utterance. An example of this use of *totally* is shown in (2). When *totally* targets a lexicalized scale (e.g. The bus is totally full), as other intensifiers typically do, these social meanings are not observed. An example of this use of *totally* is shown in (3).

(2) You should totally click on that link!

(3) The bus is totally full.

While that study shows that semantically distinct variants of a single form can have different social indexical values, Acton & Potts (2014), as well as Beltrama (2018), have shown that social inferences can actually arise as a consequence of semantic meaning. Acton & Potts (2014) showed that demonstratives can be socially meaningful, using the speech of former US vice-presidential candidate Sarah Palin as a case study. Demonstratives presuppose a shared perspective between interlocutors. Acton & Potts reason that when a speaker uses a demonstrative where they could have used a different determiner, as in (4), a listener can infer by Gricean reasoning that the speaker believes the interlocutors have a shared a perspective. This leads listeners' evaluations of Palin's style to diverge depending on whether they share her political ideology: Her supporters find her relatable, while her opponents find her disingenuous.

(4) I think Americans are craving something new and different and **that** new energy and

**that** new commitment that's going to come with reform.

Beltrama (2018) showed that listeners draw inferences about speaker qualities from the level of precision a speaker chooses to use. He found that using a more precise utterance like *He called at 9:03* rather than *He called at 9:00*, for example, can cause a speaker to be perceived as more articulate, intelligent, uptight, and annoying, among other related qualities.

The variables under consideration in these two studies (determiners in Acton & Potts 2014, and levels of precision in Beltrama 2018) are not sociolinguistic variables in the sense of Labov (2004) since they are not "different ways of saying the same thing", but rather ways of saying different things. In other words, the relationship between the literal meaning of the expression and its social meaning is not arbitrary; rather, the social meaning is inferred from the literal meaning. The same seems to be true for *just*.

**4. Social implicatures.** The social inferences associated with *just* appear to be calculable from the semantic meaning of the utterance and features of the utterance context by a process of pragmatic reasoning that I sketch out below. They can therefore be understood to be instances of a kind of implicature. However, understanding these and other social implicatures requires that we set aside some of the assumptions traditionally made in formal semantics and pragmatics.

One of those assumptions is Grice's (1989) definition of meaning in terms of a speaker's intentions. The standard Gricean account of implicature holds that implicatures are licensed by reasoning about what a speaker intends to convey (Grice 1975). In the dialogue in (5), for example, B's utterance implicates (but does not logically entail) that B has not drunk all of the coffee B made, and that A has B's permission to drink some of the coffee. This implicature arises because the listener reasons that B's utterance is relevant to A's question and that therefore B must *intend* to offer coffee to A.

(5) A: (Just woke up.) I need some coffee.
B: I already made some.

But social implicatures can arise even when the speaker cannot be taken to have intended them. For example, one internet commentator claims that managers who use *just* in commands can inadvertently signal that they do not appreciate their subordinates' work:

> There is a distinct difference between saying, "I need you to head up this project" versus "I *just* need you to head up this project."
>
> By adding that one word, you have loaded your statement with a subext that says, "It shouldn't be that difficult." The truth could be that the project is very daunting, has a lot of moving parts, and means an added workload and stress for your team. ...
>
> ... You may think that the word "just" softens orders, hoping that you don't sound too harsh. But the truth is that it probably results in members of your team feeling unappreciated for their effort and energy.

In this scenario, the inferred meaning—that the speaker does not appreciate the addressee's work—is clearly not the meaning the speaker intended. The inferences of insecurity and lack of confidence described in the internet commentary in Section 1 are surely also not intended

by speakers in most circumstances. This shows that what I am calling social implicatures do not perfectly correspond to the Gricean notion of "speaker meaning".

Leaving such assumptions behind, we are in a position to understand how the social implicatures associated with *just* can be inferred from the semantics of *just*. Although there are many uses of *just* in English, the examples given in the metalinguistic commentary above are all examples of its use as an exclusive particle. According to Beaver & Clark (2008) and Coppock & Beaver (2014), the function of an exclusive particle is to convey that the proposition it combines with (its prejacent) ranks unexpectedly weak on a contextually salient scale, and that all stronger possible answers to the Current Question Under Discussion (CQ) are false. The CQ at a given moment in discourse is the question to which the interlocutors are seeking to establish an answer. Every assertion is taken to be an answer to some CQ, which need not be uttered explicitly as it can be inferred from prosody (see Roberts 1996, 2012).

For example, in (6), *just* combines with the prejacent *John is a graduate student* and conveys that there was an expectation in the context that John may have held a higher position than graduate student in the academic hierarchy, such as postdoc or professor. These stronger alternatives are ruled out by *just*.

(6) CQ: What is John's position in the department?
John is **just** a graduate student. (Coppock & Beaver 2014)
a. Alternatives ruled out: ~~John is a postdoc~~, ~~John is a professor~~, etc.

The social meanings attributed to *just* seem to arise when it combines with a prejacent that makes some sort of imposition on the addressee, such as the request in (7). Such a request is an answer to the (often implicit) question *What would you like me to do?*. *Just* conveys that what is being requested is unexpectedly weak on a scale of difficulty or inconvenience, and it rules out the other contextually relevant alternatives that express more difficult or inconvenient things the speaker could have requested.

The effect of *just*, then, is an inference that the speaker could have been expected to request more but chose not to. This leads the listener to infer that the speaker does not intend to impose on the addressee, which is a form of politeness (see Brown & Levinson 1987). From this, the listener may infer that the speaker is displaying other qualities that are ideologically linked to politeness in the indexical field (see Silverstein 2003; Eckert 2008): non-aggression, humility, deference, insecurity, femininity, etc.

(7) **Request:**
CQ: What would you like me to do?
I was **just** wondering if you could pick up the donuts for the meeting.
a. Alternatives ruled out: ~~I was wondering if you could lead the meeting~~, ~~I was wondering if you could drive everyone home after the meeting~~, etc.
$\rightsquigarrow$ The speaker could have requested more of the addressee than picking up the donuts but chose not to.
$\rightsquigarrow$ The speaker does not wish to impose on the addressee.
$\rightsquigarrow$ The speaker is being polite and non-aggressive.

Note that the alternatives in (7) are generated by varying the content of the *if*-clause. The sentence would have a different reading if the relevant alternatives were instead generated by replacing *wondering* with other verbs to produce sentences like *I am asking...*, *I am hoping...*,

etc. This is the reading that would result if prosodic focus were placed on *wondering* and the salient question were something like *How are you requesting that I pick up the donuts?* However, this is not the most natural reading or prosody when the request is uttered out of the blue. One piece of evidence that the alternatives in (7) really are the alternatives being ruled out is the fact that (8) is contradictory and therefore infelicitous.

(8) I was **just** wondering if you could pick up the donuts for the meeting. #I was also wondering if you could lead the meeting.

Disagreements, like requests, also make an imposition on the addressee, specifically by inducing the addressee to change their beliefs. Once again, *just* can minimize this imposition, conveying that the speaker could have disagreed more strongly but chose not to. It can then be that the speaker does not want to impose their beliefs on the addressee, which means that the speaker is being polite and deferential.

(9) **Disagreement:**
CQ: What did you think about my presentation?
I **just** think you should reconsider your recommendation.
a. Alternatives ruled out: ~~I think your recommendation is completely wrong~~, ~~I think you are wrong about everything~~, etc.

$\rightsquigarrow$ The speaker could have disagreed more strongly but chose not to.
$\rightsquigarrow$ The speaker is reluctant to impose their views on the addressee.
$\rightsquigarrow$ The speaker is being polite, non-aggressive, and deferential.

In contrast, when *just* occurs in an utterance that does not make an imposition on the addressee, these social inferences seem not to be triggered. I will call such utterances *aligned contexts*, and I will call utterances that do make an imposition *unaligned contexts*. Offers and disinterested advice are examples of unaligned contexts.

In an offer, such as (10), the speaker commits to wanting the addressee to have something the addressee is assumed to want. The relevant alternatives in (10) are other things the speaker could offer, and the scale is something like the difficulty or inconvenience of the offer to the speaker. *Just* therefore conveys that the offer the speaker could be expected to make an offer that would be more difficult or inconvenient for them. This produces the inference that the offer is not a significant burden on the speaker.[6] At least in some contexts, this may signal certain social characteristics like friendliness or generosity, but the social meanings under consideration in this project, which result from the minimization of an imposition on the addressee, do not seem to be triggered in this kind of context.

(10) **Offer:**
I'll **just** stop by your desk later today to see if you need help setting up the new software.
"I'm offering to stop by your desk later today..."
a. Alternatives ruled out: ~~I'm offering to set up the new software for you.~~, ~~I'm offering to teach you how to use the new software~~, etc.

[6] Note that by ruling out stronger alternatives here, *just* does not convey that the speaker is unwilling to offer the stronger alternatives, but rather that the speaker is not offering those alternatives in the current utterance, leaving open the possibility that they could be offered in the future.

$\rightsquigarrow$ The speaker is offering less than they are capable of offering.
$\rightsquigarrow$ Stopping by the addressee's desk is not a burden on the speaker.
$\not\rightsquigarrow$ The speaker is deferential, non-aggressive, insecure, etc.

In disinterested advice, such as (11), the speaker assumes a goal of the addressee and then instructs the addressee how to achieve that goal. (See Condoravdi & Lauer 2012 for discussion of the properties of offers and advice.) The relevant alternatives are other ways the goal could be achieved, ordered according to how difficult they would be for the addressee. By ruling out the stronger alternatives, *just* conveys that the advice the speaker has chosen to give is an easier way to achieve the goal than the alternatives. Again, the social meanings we are interested in do not arise.

(11) **Disinterested advice:**
If you're not sure how to get to the conference tomorrow, I'd **just** recommend getting a ride from John.
a. Alternatives ruled out: ~~I'd recommend riding the bus~~, ~~I'd recommend taking an Uber~~, etc.
$\rightsquigarrow$ The advised course of action is easier than it could have been.
$\not\rightsquigarrow$ The speaker is deferential, non-aggressive, insecure, etc.

It is worth noting that exclusive *just* seems to be able to carry other social meanings besides the politeness-related meanings under consideration in this study. For example, in imperatives like those in (12), *just* can make the speaker sound impatient or frustrated, perhaps because the addressee is being uncooperative. Such inferences will not be considered in this study, but future work could aim to identify what contextual and linguistic factors prevent *just* from sounding polite in utterances like (12-a) and (12-b).

(12) a. Come on, **just** pass me the salt!
b. **Just** give me ten dollars!

It should be clear that the inferential processes discussed in this section are highly contingent on contextual factors and the listener's ideology. The goal of this project is to begin to understand the role that such factors play.

4.1. HYPOTHESES. The following hypothesis follows from the preceding discussion in Section 4:

(13) **Hypothesis 1:** Listeners will infer politeness, deference, insecurity, humility, non-aggression, and femininity from the use of *just* as an exclusive particle only in unaligned contexts (i.e., in contexts where the speaker is making an imposition on the addressee).

This study will also test the following two hypotheses concerning gender and authority:

(14) **Hypothesis 2:** Listeners will more strongly infer politeness, deference, insecurity, humility, non-aggression, and femininity from the use of *just* when the speaker is a woman than when the speaker is a man.

(15) **Hypothesis 3:** Listeners will more strongly infer politeness, deference, insecurity, humility, non-aggression, and femininity from the use of *just* when the addressee has authority over the speaker.

Hypotheses 2 and 3 are consistent with a broader hypothesis that listeners more readily perceive speaker qualities that confirm their expectations: Since women and subordinates are popularly believed to exhibit these qualities more than men and authority figures, listeners will more strongly perceive displays of these qualities in women and subordinates. An alternate possibility, which we will see is more consistent with the results of the study, is that listeners more strongly perceive speaker qualities that *defy* their expectations, leading *just* to have a stronger effect on the perception of men and authority figures.

**5. Methods.** This study used a Qualtrics survey to collect information about the social inferences that participants drew about fictional speakers using *just* in particular contexts. Participants read artificially constructed instant messages, and for each message, they were asked to imagine that it was sent to them by someone they work with. The stimuli varied along four dimensions: The presence of *just*, the gender of the fictional author, the level of authority of the author (boss, coworker, or subordinate), and whether the message performed a speech act that made an imposition on the addressee.

Each stimulus consisted of a one- to three-sentence introduction followed by a constructed instant message addressed to the participant. The introduction established a workplace scenario to contextualize the message and included the author's name and pronouns and whether they were a boss, coworker, or subordinate. The instant messages were constructed by first selecting two speech acts—request and disagreement—that make an imposition on the addressee and two other speech acts—offer and disinterested advice—that do not make an imposition on the addressee. For each of these speech acts, two instant messages performing that speech act with a first-person declarative sentence were constructed in such a way that *just* could be felicitously inserted. Two examples of stimuli are shown in Figure 1.

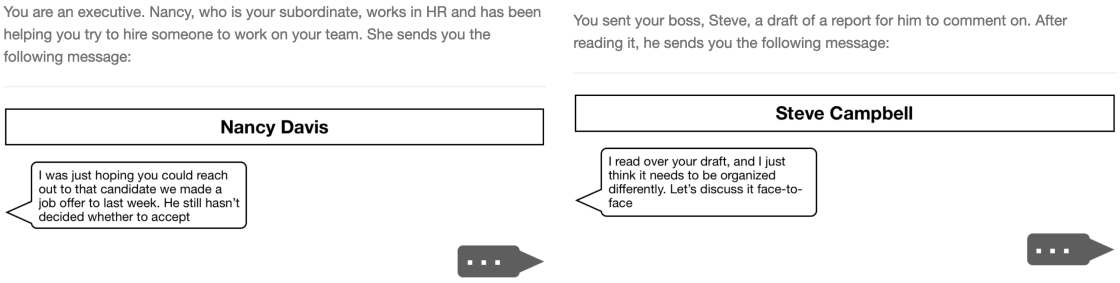


Figure 1. Two examples of stimuli used in the experiment.

Each participant read a total of eight messages, one representing each of the eight scenarios (two for each speech act). The presence of *just* and the message author's gender and level of authority in each stimulus were randomized. Since no participant saw more than one stimulus with the same scenario, no participant saw both the *just*-containing and non-*just*-containing versions any one text. This was intended to prevent participants from inferring that the experiment was about *just*.

Two pilot studies were conducted to confirm that the stimuli were plausible as messages sent in a work environment. In the first pilot, 20 participants read one stimulus for each scenario and were asked, "Does this sound like a message that someone would send in this situation in real life?" If they responded "No," they were asked, "Why not?" The stimuli were

revised based on feedback collected in this pilot and then piloted a second time with 20 different participants. In the second pilot, at least 75% of participants judged each stimulus to be realistic.

In the main study, participants were asked to rate the degree to which the author of each message exhibited various qualities, as is common practice in social perception research (see e.g. Lambert et al. 1960; Campbell-Kibler 2007). After reading each stimulus, participants were asked questions of the form, "How ⟨ADJECTIVE⟩ does he/she sound?" for each of 12 adjectives. The adjectives used are shown in Table 1. They were chosen in pairs such that ratings for the adjectives within each pair would be expected to correlate with each other because the adjectives were either synonyms or antonyms.

| | |
|---|---|
| Polite | Rude |
| Deferential | Assertive |
| Feminine | Masculine |
| Aggressive | Confrontational |
| Confident | Insecure |
| Humble | Arrogant |

Table 1. Speaker qualities that participants were asked to rate.

Participants responded by moving the head of a slider between "Not at all" and "Extremely" for each adjective. The slider heads started in the leftmost position, and the point at the middle of the scale was labeled "Somewhat". The order of the questions was randomized for each participant.

At the end of the study, participants were asked for information about their background, including their gender, their age, their race/ethnicity, whether they have been speaking American English since before they were five years old, and whether they have ever been employed in a workplace where employees communicate with each other via an instant message service.

For the main study, 200 participants were recruited via Prolific, though one participant's responses were not recorded by Qualtrics. All participants were Americans over the age of 18, and each was paid $1.34 for their participation. A majority (62%) of the participants were white. The other racial/ethnic groups most represented in the sample were Hispanic or Latinx (8%), East Asian (7%), and Black or African-American (7%). 16% of participants identified as another ethnicity or more than one. 54% of participants identified as men, 44% as women, and 2% as nonbinary. A majority (63%) reported that they had been employed in a workplace where employees communicated via instant message, and almost all (96%) reported that they had been speaking American English since before they were five years old. The seven participants who had not were assumed not to be native speakers and were excluded from analysis. An additional participant was excluded because all of their responses were ratings above 80%, which indicates that they were likely not attending to the task since most of the adjective pairs were antonyms.

Due to a survey construction error, 11 participants' ratings of one stimulus were not recorded. Since this represents less than 0.5% of the observations in the dataset, it is unlikely to have affected the conclusions of the study.

5.1. STATISTICAL ANALYSIS. Factor analysis was performed on the data to reduce the number of dependent variables. Factor analysis on the entire dataset yielded six factors, but the data do not satisfy the independence assumption for factor analysis since each participant rated eight stimuli. Factor analysis was therefore also run separately on the responses for each of the stimuli. Only three of the six factors were stable across all of the stimuli, so new dependent variables were created by averaging the variables that consistently loaded onto those three factors. The other dependent variables were left uncombined. The three new variables and the variables that were combined to create them are shown in Table 2.

| Factor | Variables combined |
|---|---|
| Rude | Rude, Arrogant, Aggressive, Confrontational |
| Confident | Confident, Assertive |
| Humble | Humble, Polite |

Table 2. Factors resulting from factor analysis.

Linear mixed-effects regression models for the twelve dependent variables were built in R using the lmer package. Best-fit models were fitted by manually stepping up: First the three manipulated variables (gender, authority, and alignment) and their interactions with *just* were added to each model one at a time and retained if they significantly improved the model, and then the same was done for the demographic variables and their interactions with *just*. The interaction between the author's gender and the participant's gender was also tested. Random slopes were then added to the models, but for some items some slopes had to be excluded because they caused the model to fail to converge.

**6. Results.** The items Deferential and Insecure exhibited statistically significant effects relevant to the hypotheses of this study. Unexpectedly, participants rated IM authors who used *just* as significantly less deferential than those who did not. The primary hypotheses laid out in Section 4, however, concern interactions between the presence of *just* and the other manipulated variables. The interaction between *just* and the speaker's gender was statistically significant, but the effect was different than hypothesized: Men who used *just* were perceived to be more insecure than men who did not, but *just* did not increase the perceived insecurity of women.

6.1. EFFECT OF "JUST". The regression model for the speaker quality "deferential" is shown in Table 3. Instant message authors who used *just* were rated 2.631 points less deferential (on a 100-point scale) than those who did, and this effect is statistically significant (p=0.036). At first glance, this result appears to be at odds with popular discourse about *just*.

However, the effect is driven by only two of the eight scenarios tested and is no longer significant when those scenarios are removed from analysis. The effect of *just* on deference in each of the eight scenarios is shown in Figure 2, with the two scenarios driving the effect outlined in red.

One possible explanation for this result is that the context provided in those two scenarios, which are shown in Figure 3 might have inadvertently included elements that allowed *just* to have an effect contrary to the one being studied. For instance, in the first of the two scenarios, which is the request shown on the left side of Figure 3, it is possible that readers perceived the


Figure 2. Deference ratings with and without *just* for each of the eight scenarios, with the two scenarios driving the effect of *just* on perceived deference outlined in red.

request to pick up the donuts to be a large imposition, which would make the attempt to minimize it using *just* come across as disingenuous. This could be perceived as an attempt by the speaker to manipulate the addressee into doing what the speaker wants, which is the opposite of deferential. In the other scenario, which is the advice shown on the right side of Figure 3, the use of *just* might suggest that the speaker thinks the advice being offered is obvious and should therefore be accepted unquestioningly, so *just* would be making the speaker sound less deferential. More research is needed to identify exactly what contextual conditions determine which of its possible social meanings *just* carries.

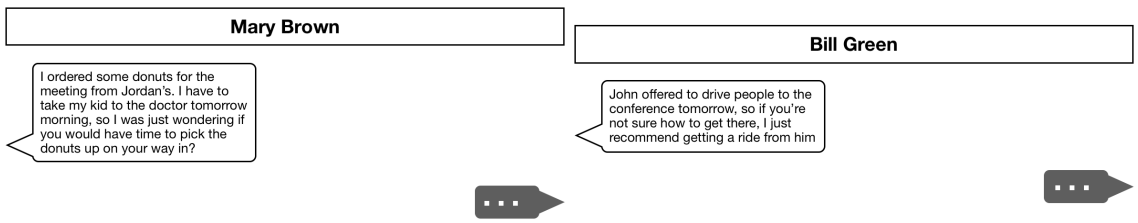


Figure 3. The two scenarios driving the effect of *just* on perceived deference.

6.2. INTERACTION BETWEEN "JUST" AND GENDER. Although the main effect of *just* on perceived insecurity is not significant, there is a significant interaction (p=0.01136) between the presence of *just* and the message author's gender. Women who used *just* were not rated as more insecure than women who did not, but men who used *just* were rated as more insecure than men who did not. This is illustrated in Figure 4. The best-fit model for insecurity is shown in Table 4.

This finding contradicts Hypothesis 2, according to which *just* would increase the perceived insecurity of women more than it would that of men. This prediction was based on the hypothesis that participants would more strongly perceive speaker qualities that they expected, and that they would expect women to exhibit insecurity because of common gender stereotypes. The observed effect suggests that expectations do not influence perceptions in the

Random Effects

| Groups | Name | Variance | Std. Dev. |
|---|---|---|---|
| Participant | (Intercept) | 359.61 | 18.963 |
| | Just (reference level is 0) | | |
| | 1 | 23.78 | 4.876 |
| Residual | | 376.71 | 19.409 |

Number of objects: 1508, groups: Participant, 191; Scenario, 8

Fixed Effects

| | Estimate | Std. Error | df | $t$ value | Pr($>\|t\|$) |
|---|---|---|---|---|---|
| (Intercept) | 30.9505 | 1.5561 | 188.1862 | 19.890 | $<2\times10^{-16}$ |
| Speech Acts (reference level is Request) | | | | | |
| Advice | -2.9888 | 0.8818 | 1318.6984 | -3.389 | 0.000721 |
| Disagreement | -1.3157 | 0.8720 | 1317.2103 | -1.509 | 0.131580 |
| Offer | 1.4084 | 0.8690 | 1315.4712 | 1.621 | 0.105328 |
| Just (reference level is 0) | | | | | |
| 1 | -2.5681 | 1.1165 | 187.5224 | -2.300 | 0.022538 |

Table 3. The best-fit regression model for deference.

way hypothesized: A possible explanation for the data is that if participants expect men not to express insecurity, then they perceive insecurity expressed by men more strongly than that expressed by women because men's expressions of insecurity defy expectations.

**7. Conclusions.** This study provides some evidence for one of the social meanings of *just* discussed in popular discourse: In at least some contexts, men who used *just* were perceived to be more insecure than men who did not. However, the fact that this effect was not observed for women is evidence against Hypothesis 2, according to which *just* would increase the perceived insecurity of women more than that of men because they would expect women to display more insecurity. This result suggests that listeners actually more strongly perceive speaker qualities that clash with their expectations. If this is broadly true, then prescriptions against women's use of *just* and other expressions that may signal insecurity are unlikely to reduce the perceived insecurity of women as long as women are stereotyped as insecure.

Authority, on the other hand, did not have a statistically significant interaction with *just* in any of the regression models constructed. One possible explanation for this is that listeners do not have strong expectations about how much their bosses, coworkers, and subordinates display the 12 qualities considered.

The data are inconclusive with respect to Hypothesis 1. There were no significant interactions between alignment and the presence of *just* in any of the models. It may be the case the notion of alignment is not sufficiently fine-grained. If there are other contextual factors besides the presence of an imposition that affect the availability of the social meanings being investigated but were neither manipulated nor successfully controlled for, the intended social meanings may not arise in all of the unaligned scenarios. That this may indeed be case is also pointed to by the data pertaining to the effect of *just* on the perception of deference: The pres-

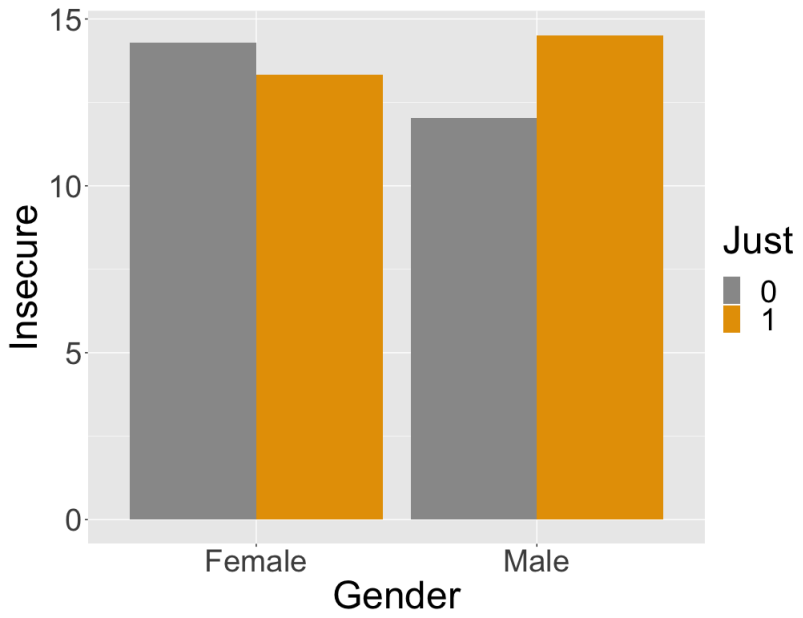


Figure 4. Ratings of insecurity by gender and the presence of *just*.

ence of *just* in a request unexpectedly resulted in *lower*, rather than higher, ratings of deference. This suggests that something other than alignment in the context is causing *just* to make the IM author seem less deferential. One possibility, discussed in the previous section, is that listeners consider the request to be a rather large imposition, which causes the attempt at minimization to backfire. Future work should identify exactly which contextual variables bear on the social meaning of *just*.

Another possible direction for future work is to explain why *just* appears to be better-suited to carrying social meaning than other exclusive particles. In the kinds of constructions in which *just* is claimed to be socially meaningful, *just* is typically not interchangeable with other exclusives like *only* or *merely*. For example, using *only* or *merely* instead of *just* in the request in (16) is pragmatically odd, but the existing semantic literature on exclusives does not provide an explanation as to why. This suggests that there are subtle semantic differences between *just* and other exclusives, and elucidating what those differences are should shed light on what kinds of semantic properties make an expression an effective carrier of social meaning.

(16) a. I was **just** wondering if you could pick up the donuts.
b. #I was **only** wondering if you could pick up the donuts.
c. #I was **merely** wondering if you could pick up the donuts.

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Random Effects

| Groups | Name | Variance | Std. Dev. |
|---|---|---|---|
| Participant | (Intercept) | 130.157 | 11.409 |
| | Gender (reference level is Female) | | |
| | Male | 17.434 | 4.175 |
| Scenario | (Intercept) | 8.209 | 2.865 |
| Residual | | 211.864 | 14.556 |

Number of objects: 1505, groups: Participant, 191; Scenario, 8

Fixed Effects

| | Estimate | Std. Error | df | $t$ value | Pr($>\|t\|$) |
|---|---|---|---|---|---|
| (Intercept) | 18.97411 | 3.63720 | 141.84572 | 5.217 | $<6.33\times10^{-7}$ |
| Alignment (reference level is Unaligned) | | | | | |
| Aligned | -7.93151 | 2.16342 | 7.89922 | -3.666 | 0.00648 |
| Just (reference level is 0) | | | | | |
| 1 | -0.51383 | 1.13685 | 1319.96734 | -0.452 | 0.65136 |
| Gender (reference level is Female) | | | | | |
| Male | 2.33296 | 2.14382 | 235.58506 | 1.088 | 0.27761 |
| Participant Age | | | | | |
| Age | -0.17873 | 0.07598 | 192.06792 | -2.352 | 0.01967 |
| Participant has experience with IMs at work (reference level is No) | | | | | |
| Yes | 3.38773 | 1.82447 | 192.42791 | 1.857 | 0.06486 |
| Participant Gender (reference level is Nonbinary) | | | | | |
| Male | 3.54914 | 2.50834 | 186.59974 | 1.415 | 0.15875 |
| Female | 1.92218 | 2.53775 | 186.22596 | 0.757 | 0.44975 |
| Interaction of Just and Gender | | | | | |
| Just and Male | 3.69282 | 1.61082 | 1375.62735 | 2.293 | 0.02203 |
| Interaction of Gender and Participant Gender | | | | | |
| Male and Male | -4.31731 | 2.10711 | 186.15552 | -2.049 | 0.04187 |
| Male and Female | -6.08399 | 2.14199 | 187.86557 | -2.840 | 0.00500 |

Table 4. The best-fit regression model for insecurity.