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An empirical investigation of intuitions about uptake

Sarah A. Fisher[a], Kathryn B. Francis[b] and Leo Townsend[c]

[a]Department of Political Science and School of Public Policy, UCL, London, UK; [b]School of Psychology, Keele University, Keele, UK; [c]Department of Philosophy, University of Reading, Reading, UK

ABSTRACT
Since Austin's introduction of the locutionary-illocutionary-perlocutionary distinction, it has been a matter of debate within speech act theory whether illocutionary acts like promising, warning, refusing and telling require audience 'uptake' in order to be performed. Philosophers on different sides of this debate have tried to support their positions by appealing to hypothetical scenarios, designed to elicit intuitive judgements about the role of uptake. However, philosophers' intuitions appeared to remain deadlocked, while laypeople's intuitions have not yet been probed. To begin rectifying that, we ran two experiments probing lay intuitions about the implications of uptake failure. Overall, we found that participants' responses were skewed towards agreement that speech acts were performed, despite the lack of uptake. There were, however, significant differences across the four different speech act types we investigated (with the highest levels of agreement found for refusing, followed by warning, then telling, and finally promising). We also obtained evidence of complex effects relating to the (high or low) stakes involved in the scenarios. While this study only represents an initial exploration of intuitions about uptake, our results form a basis for further research into their nature and significance, across a range of speech acts, scenarios, and experimental designs.

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1. Theoretical background: speech act theory

In a pivotal contribution to mid-twentieth Century western philosophy of language, J. L. Austin (1975) argued that people do not merely say things but *do* things with their words. Clear examples include the wedding officiant who enacts a marriage in saying 'I now pronounce you married', the authorised official who names a ship in saying 'I hereby

CONTACT Sarah A. Fisher sarah.a.fisher@ucl.ac.uk Department of Political Science and School of Public Policy, UCL, London WC1H9QU, UK

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name this ship HMS Titanic', or any individual who makes a promise to another in saying 'I promise … '. In each case, language produces a real change in the world, altering the legal, social, or moral status of persons or things. These things done with words (things such as pronouncing a couple married, naming a ship, making a promise, etc.) have come to be known in the subsequent literature as 'speech acts'.

Austin's ideas have been developed in a strand of philosophical research known as 'speech act theory'. One preoccupation of speech act theory has been to delineate the distinct kinds of acts involved in making utterances. Most importantly, Austin drew a distinction between three categories of acts. First, 'locutionary' acts include 'the utterance of certain noises, the utterance of certain words in a certain construction, and the utterance of them with a certain 'meaning' in the favourite philosophical sense of that word, i.e. with a certain sense and a certain reference' (Austin 1975, 94). In contrast, 'perlocutionary' acts include 'certain consequential effects upon the feelings, thoughts, or actions of the audience, or of the speaker, or of other persons' (Austin 1975, 101); for example, saying to a student 'You made an excellent point in class today' might motivate her to continue her studies. Finally, we perform 'illocutionary' acts in using our words with a particular *force*. The example just given would be an instance of *praising*. Other examples of illocutionary acts include advising, suggesting, ordering, promising, warning, refusing, and so on. Following Austin, speech act theorists have been particularly interested in this illocutionary category (indeed, in much of the received literature, the term 'speech act' is used interchangeably with 'illocutionary act').

There remains substantive disagreement, however, about the conditions for performing illocutionary acts – i.e. what exactly makes it the case that a particular illocutionary act has been performed. Broadly speaking, the possible criteria fall into three categories: those concerning the speaker's *intentions*; those concerning *social conventions*; and those concerning the audience's *'uptake'* – where this means the audience taking the speaker to be performing an act with a particular illocutionary force (e.g. promising, naming, warning, etc.). Our focus here will be on the uptake condition.

1.1. The role of uptake in performing illocutionary acts

Austin himself makes some (admittedly rather vague and hesitant) remarks linking the performance of illocutionary acts with audience uptake:

> Unless a certain effect is achieved, the illocutionary act will not have been happily, successfully performed […] I cannot be said to have warned an audience unless it hears what I say and takes what I say in a certain sense. An effect must be achieved on the audience if the illocutionary act is to be carried out. How should we put it best here? And how should we limit it? Generally the effect amounts to bringing about the understanding of the meaning and of the force of the locution. So the performance of an illocutionary act involves the securing of *uptake*. (Austin 1975, 116–117)

Austin seems to suggest here that whether or not a speaker performs a given illocutionary act could depend in part on whether the audience takes her to be doing so.[1]

Subsequent speech act theorists have adopted starkly differing positions in relation to the role and importance they attribute to audience uptake. In one camp are those who consider uptake to be (often or always) necessary for the performance of an illocutionary act. Prominent contemporary proponents of this view include Langton (1993), Hornsby and Langton (1998), Moran (2018), McDonald (2020), and Caponetto (2021). In another camp are those who deny that uptake is (usually or ever) necessary. Philosophers on this side of the debate include Jacobson (1995), Alston (2000) and Bird (2002), who argue for the overriding importance of speaker intentions and/or social conventions.[2]

De Gaynesford (2011, 2017) argues for an intermediate position: uptake is necessary for some speech acts but not others. He tries to uncover the distinct features of those acts which are uptake-dependent vs. those which are uptake-independent. De Gaynesford considers four features that may be thought to ground the distinction: content-hunger (whether or not the act requires content in order to be properly specified), directedness (whether or not the act has a person or thing as its formal object), addressee-dependence (whether or not the act must be addressed to the person or thing to whom it is directed) and witness-dependence (whether or not the act must be observed or evidenced). His suggestion is that uptake-dependent acts are those that are either addressee- or witness-dependent, while acts that are neither witness- nor addressee-dependent are uptake-free. De Gaynesford cites as prominent examples of addressee-dependent acts betting, entreating,

[1]See also Austin's earlier remarks on how at least certain speech acts depend on being heard and understood: 'It is obviously necessary that to have promised I must normally (A) have been heard by someone, perhaps the promise; (B) have been understood by him as promising' (Austin 1975, 22).

[2]Note that we will not consider the claim that uptake is *sufficient* for performing an illocutionary act, as suggested by Searle (1969), McDowell (1980), and Hornsby (1994). Instead, we restrict our focus to claims concerning the necessity of uptake.

and thanking (as contrasted with cursing, blaming, conceding, and adjourning, where the person or thing to whom the acts are directed need not be the same as the person or thing to whom they are addressed). Meanwhile, witness-dependent acts include conceding, betting, and adjourning (as contrasted with cursing, blaming, entreating and thanking, which do not require observation or evidence for their performance).

It is worth noting at this point that uptake can fail in various different ways. For example, an audience might not receive the relevant physical signal, as when a speaker is too far away or a thank you letter gets lost in the post. Alternatively, the audience might fail to understand the meaning of (some or all of) the words uttered, for example if the utterance is ambiguous, or if one or both of the interlocutors is not a competent language-user. Finally, the audience might take an utterance to have a different illocutionary force from the one the speaker intended, or from the one that would normally be associated with the linguistic formulation as used in the particular context. In what follows, we will restrict our focus only to this final kind of uptake failure, concerning the *illocutionary force* of the utterance. We take this to be the primary target of debate in the literature.[3]

1.2. Intuitions about uptake

The studies reported below are initial experimental explorations of language users' intuitions about uptake. Much of the literature on uptake accords an important role to scenario-based thought experiments, designed to elicit readers' intuitions about whether or not an illocutionary act has been performed. Especially prominent are scenarios involving women's sexual refusal, influentially discussed by Langton (1993), as well as Hornsby (1994, 1995), Jacobson (1995), Hornsby and Langton (1998), Bird (2002), Maitra (2004), McGowan et al. (2011), Mikkola (2011) and others.

It is true that Langton develops a highly theoretical argument for the idea that uptake failure leads to what she calls 'illocutionary disablement' or 'illocutionary silencing', whereby the speaker is unable to perform the desired speech act. Nevertheless, many of those writing afterwards have

[3]It is not the exclusive focus, though, and several of the hypothetical scenarios discussed by the theorists mentioned above concern audiences who fail to hear or understand the meanings of utterances. Therefore, it would be useful in future research to examine how intuitions vary across these different kinds of cases too.

relied more heavily on hypothetical examples or case studies, which are intended to support or undermine the more general claim that uptake is necessary for the performance of some or all illocutionary acts.

To illustrate the role of scenario-based examples in this literature, consider first this well-known scenario from Hornsby and Langton (1998):

> A woman says "No" to a man, when she is trying to refuse sex; she uses the right locution for an act of refusal, but somehow her speech goes wrong. The woman says "No" and the man does not recognise what she is trying to do with her words. She says "No", intends to refuse, but there is no uptake in her hearer. She is therefore not fully successful in refusing: she fails to perform the illocutionary act of refusal (Hornsby and Langton 1998, 27)

It is not clear whether Hornsby and Langton think that their conclusion about this scenario – that the woman fails to perform the act of refusing – is 'intuitive' or in line with the judgments we might expect from lay speakers about the scenario. Nevertheless, their conclusion has been criticised for its alleged un-intuitiveness. Bird, for example, offers a scenario involving refusal that is meant to be relevantly similar to Hornsby and Langton's sexual refusal case, but he claims that the verdict favoured by Hornsby and Langton goes against common sense:

> Consider the example of Jacques the conceited chef. He believes that no-one can get enough of his wonderful cooking. When Jacques offers someone more of a dish they sometimes say "No, thank you" but, he thinks, they really want him to offer yet more delicious food. His misapprehension that his mediocre fare is universally adored may be fed by his being part of a community of conceited and mutually congratulatory chefs, whose self-image is inflated by sycophantic restaurant critics and a greedy food industry. So when Sara says "No" intending to decline an offer of food, there is not even a flicker of uptake in Jacques. On the contrary, he takes this as a reason to give her yet more. Nothing she says can prevent him; every utterance of a protest is taken as an encouragement to pile her plate high with unwanted fodder. Langton and Hornsby's interpretation must be that because Jacques failed to see that Sara was intending to refuse, nothing she said was a refusal. *That is not, I believe, how most people would read this case.* (Bird 2002, 10–11, our emphasis)

Other theorists, while somewhat less explicit than Bird, also seem to tacitly invoke ideas of what is intuitive or commonsensical in cases involving uptake failure. Alston, for example, motivates his dismissal of the notion that uptake is necessary for illocutionary performance, by focusing on the act of telling:

> It is clear that [uptake is not necessary for the performance of illocutionary acts]. Whether I told you that the dean is coming to dinner […] does not hang on whether you heard or understood me. If you didn't, my communicative purpose has been frustrated. But it doesn't follow that I didn't tell you […] In response to a charge that I hadn't told you that the dean was coming I might reply, "I told you all right; perhaps you didn't hear me" (Alston 2000, 24).

As a final example, consider how De Gaynesford (2017, 88) responds to the above passage from Alston:

> *Telling you* could not be the particular illocutionary act it is unless securing the addressee's uptake were indeed required for its performance. On being told that you had not heard, or had not understood, there would be something bizarre about my continuing to insist 'Well, I did *tell you*!' Retreating somewhat would be the natural step on discovering how things stand: 'Well, I did *try* to tell you.' And this advertises one's sense that, not having secured your understanding, I have not actually told you.[4]

Although neither Alston nor De Gaynesford make explicit predictions about how most people would read their examples, in talking about what is 'clear' and 'natural' (or what would be 'bizarre') they too can be read as appealing to ordinary intuitions.

This small collection of examples also indicates how theorists have ended up drawing quite different conclusions about the role of uptake in the performance of illocutionary acts, with some assigning it much greater weight than others. In fact, we ourselves (two of the authors: SF and LT) have profoundly different intuitions about some of the key examples in the literature, and hence have found ourselves drawn to very different conclusions about the role of uptake in the performance of illocutionary acts. This difference in our own intuitions, together with our sense that speech act theorists are divided on the issue, is part of our motivation to collaborate on the study.

One purpose of the study reported here is to present a constant set of scenarios to a larger sample of language users, and elicit their judgements about the role of uptake. This will help us begin to gauge whether competent lay speakers tend to (a) judge uptake necessary for performing illocutionary acts, (b) judge uptake unnecessary for performing illocutionary acts or (c) vary widely in their views about the role of uptake.

To elaborate on point (c), it could be that intuitions do not (just) vary between individuals but (also) as a function of certain features of the scenarios being considered. One such feature, as mentioned earlier, is

[4]De Gaynesford (2011, 128–129) makes a similar point about *warning*.

the type of speech act involved (e.g. telling, warning, refusing, promising). Particularly since De Gaynesford (2011, 2017) has already proposed that uptake-dependence is a function of the type of illocutionary speech act involved, we were keen to test whether this claim could acquire support from lay speakers' intuitive judgements.

Second, we were interested in possible stakes effects, whereby judgements about a scenario are affected by how much hangs on the protagonists' actions. For example, the stakes are clearly higher in a situation where a protagonist thinks a friend is about to be attacked by a lion than one where a friend might slip in the mud. Given the fact that one of the central case studies in the uptake literature concerns the very high stakes issue of sexual refusal, we felt it was important to look for possible stakes effects from the outset of our inquiry. On the basis of our own intuitions, we suspected that the stakes involved in the sexual refusal case made people more likely to say that uptake was *not* necessary (i.e. that the woman *did* refuse); whereas lower stakes refusal cases like those discussed by Bird (2002) might be less likely to generate that response (i.e. people might be more likely to deny that refusal had occurred).[5]

Another potentially relevant feature of the scenario is what happens *after* an instance of uptake failure, including whether or not the speaker becomes aware that uptake has failed, in the sense of her intended illocutionary force not being recognised by the audience. As per the earlier quote from De Gaynesford, once a speaker becomes aware that uptake has failed, people might be more likely to deny that the speech act was performed. Conversely, the speaker might never realise that something went awry, and simply assume instead that the force of the utterance was taken in the way intended (i.e. assume that uptake was achieved). In that scenario, perhaps people are more likely to allow that the speech act was performed.

Of course, there are all sorts of other subtle differences between scenarios that could affect people's intuitions. Some of these are discussed in Section 5, where we consider possible topics for investigation in future studies.

2. Study: testing ordinary intuitions about uptake

We ran two experiments to elicit lay judgements about hypothetical speech scenarios.[6] In this section, we detail our materials and hypotheses,

[5]This is despite the fact that Bird introduces the low-stakes case in arguing against Langton's uptake-dependent account of refusing.

[6]Approval for the study was granted by the Ethics Committee of the University of Vienna (reference number 00823). Subjects provided informed consent before participating.

before describing the experiments, the first of which elicited judgements using a mixed design (Section 3) whereas the second used a fully between-subjects design (Section 4).

2.1. Vignettes

We developed 16 vignettes, beginning from scenarios involving refusal, which remained as close as possible to those put forward by Langton (1993) and Bird (2002). The high-stakes refusing vignette is reproduced below (with the *speaker aware* vs. *speaker unaware* conditions shown in brackets).

> Mark and Emily have been on a date. Mark walks Emily back to her home and she invites him in for a drink. When they get indoors, Mark makes a sexual advance on Emily. Emily says "No" intending to refuse Mark's advances. But Mark does not recognize this as a refusal. He believes Emily is coyly consenting, and he takes this as a reason to continue making advances. (Emily realises that she is not getting through to Mark, who still seems to think she is consenting to his advances.) [Emily reasons that Mark has taken what she said as a refusal, but is carrying on making sexual advances anyway.]

Participants were then asked to rate their agreement or disagreement with the statement, 'Emily refused Mark's sexual advances' on a seven point scale labelled 'Strongly disagree', 'Disagree', 'Somewhat disagree', 'Neither agree nor disagree', 'Somewhat agree', 'Agree', 'Strongly agree'.

The low-stakes refusing vignette is reproduced below, again with the speaker awareness conditions shown in brackets.

> John is a famous chef, whose ego has been inflated by restaurant critics and the food industry. As a result, he believes that no-one can get enough of his wonderful cooking. One day John is in the restaurant kitchen when one of the waitresses, Caroline, comes in. John offers Caroline some food. Caroline says "No thank you" intending to politely refuse the food. Because of John's extreme arrogance, he does not believe Caroline would ever refuse his food. Instead, he assumes Caroline is politely accepting it. So John continues preparing the food for Caroline. (Caroline realises that she is not getting through to John, who still seems to think she is accepting the offer of food.) [Caroline reasons that John has taken what she said as a refusal, but is carrying on preparing the food for her anyway.]

Participants were asked to rate their agreement with the statement, 'Caroline refused John's offer of food' on the same seven-point scale defined above.

Using these vignettes as a template, corresponding sets of scenarios were developed for the other experimental conditions, targeting the

speech acts of telling, warning, and promising. These were informally reviewed by philosophers working in speech act theory, philosophy of language, and experimental philosophy. The full questionnaires are included in Appendices A and B.

2.2. Hypotheses

We predicted that the overall response pattern would reveal a slight skew towards agreement that the speech acts had been performed, but with variations across the 16 scenarios. In particular, it was hypothesised that there would be main effects of each of the three variables under consideration:

(i) Type of speech act
(ii) Stakes involved in the scenario
(iii) Speaker awareness of uptake failure

With respect to *(i) Type of speech act*, we expected different speech acts to yield different levels of agreement. More specifically, we expected that uptake would be considered least important for *telling* and most important for *promising*, with *warning* and *refusing* in between.

We expected cases of promising to yield the lowest level of agreement, because promising has been seen by many as a clear example of an illocutionary act whose performance stands in need of uptake. Austin (1975, 22) himself claimed that uptake was 'obviously necessary' in order for someone to have promised. More recently, promising has been invoked by both Sbisà (2009) and Caponetto (2021) to illustrate the need for uptake on the specific grounds that promising imposes normative statuses on the speaker and hearer (namely, the commitment to do what is promised and the entitlement to what is promised, respectively), and the existence of these normative statuses depends on uptake.

At the other extreme, we expected cases of telling to yield comparatively high levels of agreement. This was because of our sense that telling, along with other 'assertives' like describing and stating, is intuitively closer to the merely locutionary act of *saying* that something is the case, which is not uptake-dependent. In addition, within much philosophical work on the nature of testimony, the act of telling (or *testifying*, which is frequently treated as interchangeable with telling) is typically characterised without any reference to uptake. The dominance of this uptake-independent approach to telling/testifying is reflected in Jennifer

Lackey's recent claim that 'there is not a single view in the literature on what it is to testify that supports the uptake requirement' (Lackey 2021, 142n 6). Although Lackey here overlooks some important views in the literature which do hold that telling/testifying requires uptake (such as the 'assurance' views of Hinchmann, Moran, and others, discussed in section 5.2 below), her claim nonetheless reflects the orthodoxy in the field.

As for warning and refusing cases, we expected these to lie between promising and telling in terms of agreement levels, because of how contested they appear to be in debates over the necessity of uptake. Refusing, as we saw above, has been seen by some in the silencing literature as clearly uptake-dependent, and by others as clearly uptake-independent. Warning is similar: while Austin (1975, 116) uses the act of warning to indicate the need for uptake ('I cannot be said to have warned an audience unless it hears what I say and takes what I say in a certain sense'), others are more guarded. Hornsby, for instance, uses cases of warning to show the 'ambivalence' with which we talk about cases of uptake failure: 'There are examples we might describe either with 'She warned him, but he never realised the danger' or 'She tried in vain to warn him'' (Hornsby 1994, 198).

Regarding *(ii) Stakes involved in the scenario*, we hypothesised that higher stakes would generally be associated with higher levels of agreement that the speech act had been performed. This hypothesis was generated from reading across the reasoning about refusal cases, discussed in Section 1.2, to the other types of speech act being investigated.

Regarding *(iii) Speaker awareness of uptake failure*, we expected that people would be more likely to say that uptake failure had led to speech act failure when the speaker was aware that uptake had failed, in line with the reasoning given in Section 1.2.

There were no particular hypotheses concerning interaction effects, although these were also investigated as part of the analysis.

3. Experiment 1: mixed design

In the first experiment, two of the variables (speech act type and stakes) were tested within-subjects and one (speaker awareness) was tested between-subjects.[7] In the second experiment (reported in Section 4) we sought to replicate our findings in a fully between-subjects design.

[7]In a between-subjects study design, different participants test different levels of the factor specified. For example, in Experiment 1, participants were randomly assigned to receive either speaker aware or speaker unaware cases. In a within-subjects design, the same participants test all levels of the

3.1. Materials and methods

Experiment 1 was run online using Qualtrics/ Prolific. We used a 4 × 2 × 2 design with the following within-subjects conditions:

Speech act type x 4 (telling, warning, refusing, and promising)

Stakes x 2 (low vs. high)

and the following between-subjects conditions:

Speaker's awareness of uptake failure x 2 (speaker aware vs. speaker unaware)

Each cell in the design (shaded grey in Table 1) corresponds to one of our 16 vignettes (presented in full in Appendices A and B).

401 participants were recruited through Prolific and paid 2.10 GBP for their participation.[8,9] Participants were randomly assigned to one of the between-subjects conditions, balancing for the number of participants in each condition. There were 200 participants in the speaker aware condition (receiving the questionnaire in Appendix A) and 201 in the speaker unaware condition (receiving the questionnaire in Appendix B).

Each participant received eight vignettes, randomised for order and presented one by one. After reading each vignette, participants rated their agreement or disagreement with a statement about the performance of a speech act, using a 7-point Likert scale. Participants had to complete each question before they could advance. They could not go back to review or change answers on previous pages.

Responses to the scenarios were averaged according to speech act type and stakes and used in subsequent analyses.

3.2. Results

Overall, responses were positively skewed towards agreement that speech acts were performed. This was particularly clear for telling, warning, and refusing[10] with the majority of participants responding at

factor specified. For example, in Experiment 1, all participants responded to both low stakes and high stakes versions of all speech act cases.

[8]The mean age of the sample was 36.46 years. 277 (69.07%) of the participants identified as women, 121 (30.17%) as men and 3 (0.75%) as non-binary, other or preferred not to say.

[9]Using a simulation-based power analysis (Lakens and Caldwell 2021) based on the 4×2×2 design outlined above, we determined that $n = 200$ in each between-subjects condition would be sufficient to detect the effects of interest (2000 simulations were performed using estimated means based on the predictions outlined in Section 2 and alpha criterion of .05).

[10]The distribution of agreement scores in the telling aware (low stakes) case, the warning unaware (low stakes) case, and all refusing cases were considered highly skewed (±1.5) (Tabachnick and Fidell 2013).

Table 1. Experiment 1 design.

			Between subjects	
			Speaker aware	Speaker unaware
Within subjects	Telling	Low stakes	1A	1B
		High stakes	1C	1D
	Warning	Low stakes	2A	2B
		High stakes	2C	2D
	Refusing	Low stakes	3A	3B
		High stakes	3C	3D
	Promising	Low stakes	4A	4B
		High stakes	4C	4D

the upper end of the Likert scale (indicating agreement that the speech act was performed). The mean agreement levels varied across all speech acts and also varied based on what was at stake in the scenario (low, high) and the speaker's awareness of uptake failure (aware, unaware) (see Table 2).

Inferential statistics were generated, to determine which, if any, of these differences in agreement between conditions were statistically significant. A mixed ANOVA with group (aware; unaware) as the between-subjects variable and stakes (low; high) and speech act (telling; warning; refusing; promising) as within-subjects variables was performed. The analysis found a statistically significant main effect of speech act, ($F(1, 1137.64), = 241.34$, $p < .001$) with levels of agreement highest in refusing cases, followed by warning cases, then telling cases, and lowest levels of agreement in promising cases (all speech acts statistically significantly differed from each other; $ps < .001$). There was also a statistically significant main effect of stakes, ($F(1, 399), = 54.12$, $p < .001$) with higher levels of agreement in low stakes cases. There was no statistically significant main effect of group (aware; unaware) ($p = .067$).

In terms of interaction effects, the interaction between stakes and speech act was statistically significant, ($F(1, 1103.89), = 32.53$, $p < .001$), as was the interaction between group and speech act, ($F(1, 1137.64), = 8.55$, $p < .001$) (see Figure 1).[11]

Given the presence of interaction effects, follow-up analyses were performed to determine where the differences existed. For the interaction between stakes (low; high) and speech act (telling; warning; refusing; promising), follow-up tests showed a statistically significant difference between low and high stakes cases for telling cases ($p < .001$), for

[11]There was no statistically significant two-way interaction between group and stakes ($p = .198$) or three-way interaction between group, stakes, and speech act ($p = .145$).

Table 2. Mean agreement scores and standard deviations (SD) across speech acts, stakes, and speaker awareness.

Awareness	Speech Act	Stakes	Mean (*SD*)
Aware	Telling	Low	5.71 (*1.47*)
(*N* = 200)		High	4.68 (*1.72*)
	Warning	Low	5.75 (*1.28*)
		High	5.64 (*1.34*)
	Refusing	Low	6.55 (*1.02*)
		High	6.66 (*0.88*)
	Promising	Low	4.57 (*1.67*)
		High	4.58 (*1.71*)
Unaware	Telling	Low	5.57 (*1.54*)
(*N* = 201)		High	4.64 (*1.71*)
	Warning	Low	6.01 (*1.37*)
		High	5.50 (*1.60*)
	Refusing	Low	6.56 (*0.80*)
		High	6.67 (*0.92*)
	Promising	Low	5.20 (*1.46*)
		High	5.06 (*1.50*)

warning cases ($p < .001$), and for refusing cases ($p = .039$) with higher levels of agreement in low stakes cases for telling and (to a lesser extent) warning but slightly lower levels of agreement in low stakes cases for refusing (see Figure 2). There was no difference between stakes in promising cases ($p = .47$).

For the interaction between group (aware; unaware) and speech act (telling; warning; refusing; promising), follow-up tests showed a statistically significant difference between groups *only for promising cases* ($p < .001$) with higher levels of agreement in the unaware group (see Figure 3). There is no difference between groups in the other speech act cases (*ps* > .49).

All of the above findings are replicated when using a non-parametric analysis (Generalised Estimating Equations) that takes into account the skewed distribution of the data.

Finally, we conducted an analysis of first responses only, to check for effects of our (partially) within-subjects design.[12] For example, it is possible that participants sought to achieve consistency with their previous answers; or, alternatively, they might have become better attuned to the small differences between the scenarios, as the experiment went on. Overall, the data for first responses remained skewed for telling, warning, and refusing.[13] Again, a mixed ANOVA revealed a statistically significant main effect of speech act ($F(3, 391), = 17.43$, $p < .001$) with levels

[12]Thanks to Kevin Reuter for suggesting this.

[13]The distribution of agreement scores in the telling aware (both stakes) cases, the warning unaware (both stakes) cases, and all refusing cases were considered highly skewed (±1.5) (Tabachnick and Fidell 2013).

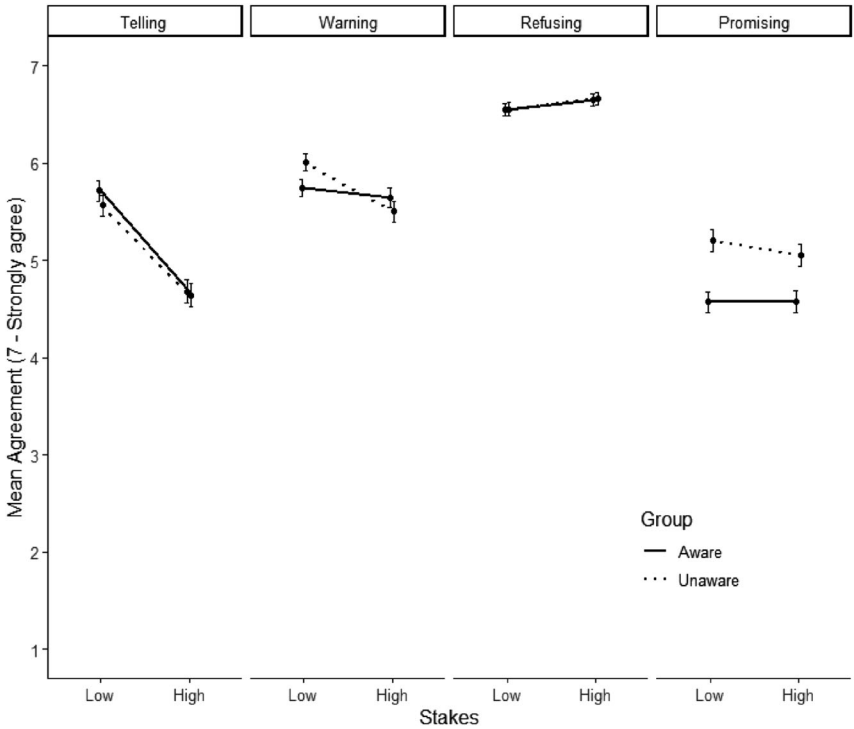

Figure 1. Mean agreement scores across speech acts, stakes, and group. Error bars represent +/− 1 standard error.

of agreement highest in refusing cases, followed by warning cases, then telling cases, and lowest levels of agreement in promising cases. In terms of statistically significant differences, all speech acts differed from one another ($ps < .005$) apart from telling and warning cases ($p = .49$) and telling and promising cases ($p = .47$).

In the analysis of first responses only, there was no statistically significant main effect of stakes ($p = .11$) and no interaction between group and speech act ($p = .198$). However, there was still a statistically significant interaction between stakes and speech act ($F(3, 391) = 9.04$, $p < .001$). Follow-up tests showed a statistically significant difference between low and high stakes cases for telling ($p < .001$) and for promising ($p = .007$) only, with higher levels of agreement in low stakes cases for telling but slightly lower levels of agreement in low stakes cases for promising (see Figure 4). As in the full analysis, there was no statistically significant main effect of group ($p = .966$).[14]

[14] As before, there was also no statistically significant two-way interaction between group and stakes ($p = .763$), and no statistically significant three-way interaction between group, stakes, and speech act ($p = .515$).

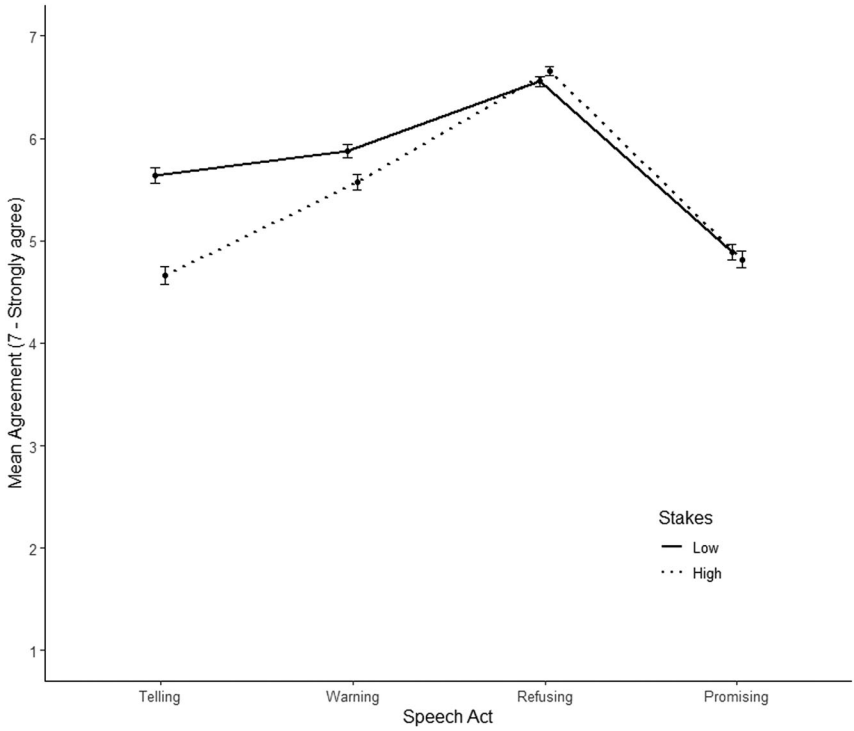

Figure 2. Line graph showing the interaction effect between stakes and speech act. There were stakes effects across all cases apart from the promising cases. Error bars represent +/− 1 SE.

Due to the differences in stakes effects when only first responses were analysed, we decided to run a second experiment using a fully between-subjects design (thus eliminating within-subjects effects). We report on that experiment next, before discussing the combined findings of both experiments in Section 5.

4. Experiment 2: between-subjects design

4.1. Materials and methods

The study was run online using Qualtrics/ Prolific. We used a $4 \times 2 \times 2$ design with the following between-subjects conditions:

Speech act type x 4 (telling, warning, refusing, and promising)

Stakes x 2 (low vs. high)

Speaker's awareness of uptake failure x 2 (speaker aware vs. speaker unaware)

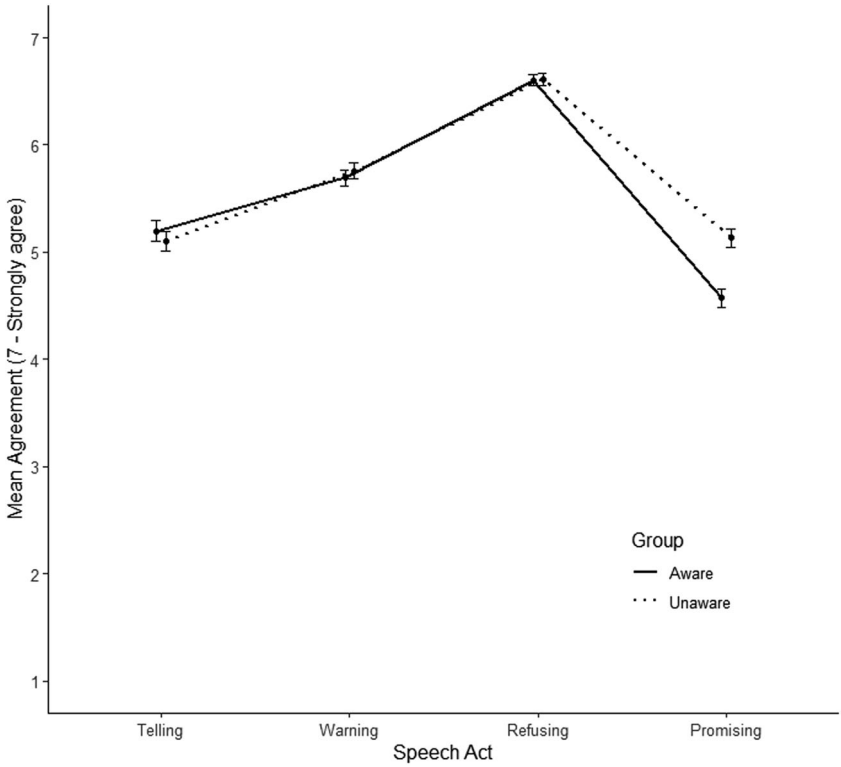

Figure 3. Line graph showing the interaction effect between group and speech act. The only statistically significant difference between group is in the promising cases. Error bars represent +/− 1 SE.

In total, 2003 participants were recruited through Prolific and paid 0.45 GBP for their participation.[15, 16] The materials were the same as in Experiment 1. However, each participant received only *one* of the 16 vignettes, randomly assigned. As before, after reading the vignette, participants rated their agreement or disagreement with a statement about the performance of a speech act, using a 7-point Likert scale. Responses were averaged according to speech act type and stakes and used in subsequent analyses.

[15]The mean age of the sample was 40.43 years. 1172 (58.51%) of the participants identified as women, 812 (40.54%) as men and 19 (0.95%) as non-binary, other or preferred not to say.

[16]A power analysis was conducted using the data from Experiment 1. We determined that $n = 125$ in each of the 16 conditions of Experiment 2 would be sufficient to detect all of the effects that had been significant in the previous experiment (based on an alpha criterion of .05; target power >.79 for the effects of interest; and a fully between-subjects design).

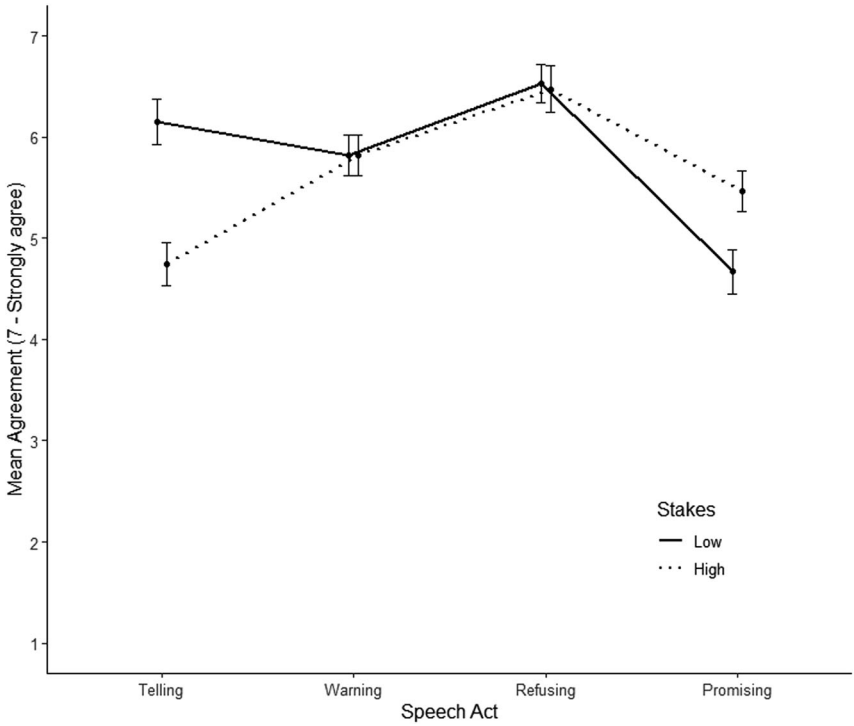

Figure 4. Line graph showing the interaction effect between stakes and speech act when only first responses were analysed. The only statistically significant differences between stakes level are in the telling and promising cases. Error bars represent +/− 1 SE.

4.2. Results

As in the first experiment, responses were skewed towards agreement that the speech act was performed in refusing, warning, and telling cases.[17] As in Study 1, mean agreement levels varied across all speech acts and also varied based on what was at stake in the scenario (low, high) and the speaker's awareness of uptake failure (aware, unaware) (see Table 3).

Inferential statistics were generated, to determine which, if any, of these differences in agreement between conditions were statistically significant. A three-way between-subjects ANOVA with speaker awareness (aware; unaware), stakes (low; high), and speech act (telling; warning;

[17]The distribution of agreement scores in the telling low stakes cases (aware and unaware), the warning low stakes cases (aware and unaware), and all refusing cases were considered highly skewed (±1.5) (Tabachnick and Fidell 2013).

refusing; promising) as between-subjects variables was performed. The analysis found a statistically significant main effect of speech act, ($F(3, 1987), = 62.96$, $p < .001$) with levels of agreement highest in refusing cases, followed by warning cases, then telling cases, and lowest levels of agreement in promising cases. All speech acts significantly differ from one another apart from telling and warning ($p = .111$). There was also a statistically significant main effect of stakes ($F(1, 1987), = 27.87$, $p < .001$) with higher levels of agreement in low stakes cases. As in Experiment 1, there was no statistically significant main effect of group ($p = .316$; Figure 5).

In terms of interaction effects, there was a statistically significant interaction between stakes and speech act ($F(3, 1987), = 47.36$, $p < .001$). Follow-up tests showed a statistically significant difference between low and high stakes cases for telling ($p < .001$), warning ($p < .001$) and promising ($p < .001$). There were higher levels of agreement in low stakes cases for telling and (to a lesser extent) warning, but lower levels of agreement in low stakes cases for promising (see Figure 6).[18] In Experiment 2, there was no statistically significant interaction between group and speech act ($p = .732$).[19]

As in the previous study, all of the above findings were replicated when using a non-parametric analysis (Generalised Estimating Equations) that takes into account the skewed distribution of the data.

5. General discussion

5.1. Overall response pattern

In both Experiment 1 and Experiment 2, across the set of 16 scenarios we tested, there was a general tendency for participants to agree with the prompt – i.e. to agree that the speech act *was* performed. This suggests that failure of uptake was not considered sufficient to prevent performance of the act. If this pattern were to extend more widely (across other speech acts, and other experimental conditions) there would seem to be greater intuitive support for the view that uptake is (often or always) unnecessary for the performance of speech acts than for the view that uptake is (often or always) necessary.

[18]As in Experiment 1, there was no statistically significant two-way interaction between group and stakes ($p = .161$), and no statistically significant three-way interaction between group, stakes and speech act ($p = .787$).

[19]Note that this mirrors the finding of the analysis of first responses from Study 1.

Table 3. Mean agreement scores and standard deviations (SD) across speech acts, stakes, and speaker awareness.

Awareness	Speech Act	Stakes	Mean (*SD*)
Aware	Telling	Low	6.21 (*1.54*)
		High	4.81 (*2.01*)
	Warning	Low	5.83 (*1.31*)
		High	5.62 (*1.33*)
	Refusing	Low	6.54 (*1.23*)
		High	6.38 (*1.51*)
	Promising	Low	4.70 (*1.71*)
		High	5.43 (*1.58*)
Unaware	Telling	Low	6.44 (*1.16*)
		High	4.68 (*2.09*)
	Warning	Low	6.06 (*1.38*)
		High	5.54 (*1.43*)
	Refusing	Low	6.53 (*1.11*)
		High	6.32 (*1.52*)
	Promising	Low	4.90 (*1.73*)
		High	5.58 (*1.49*)

It should be noted that this response pattern could have been generated or exacerbated by certain features of the experimental design, such as the way the prompt was phrased, the third-personal characterisation of

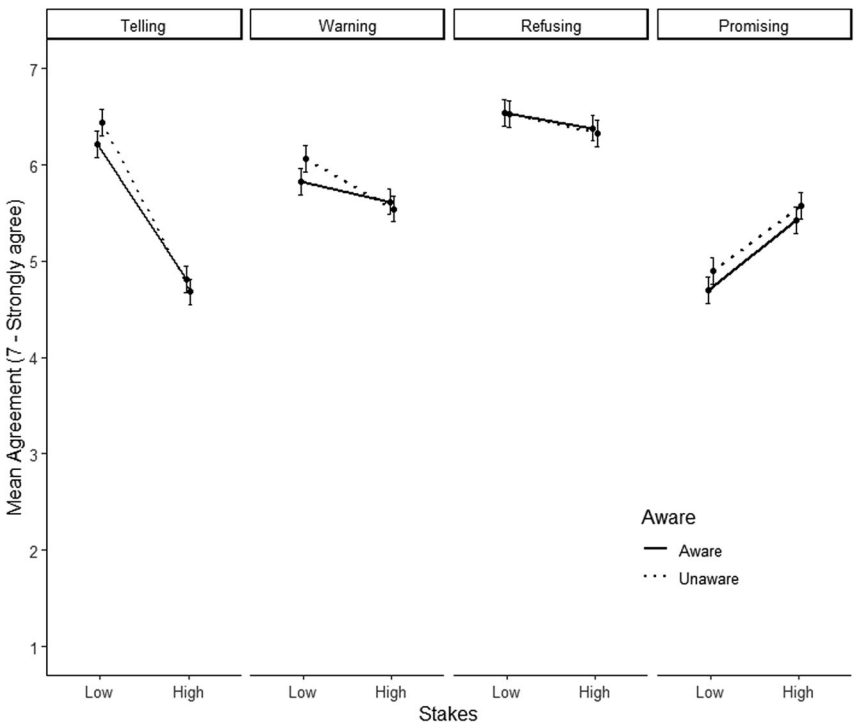

Figure 5. Mean agreement scores across speech acts, stakes, and group. Error bars represent +/− 1SE.

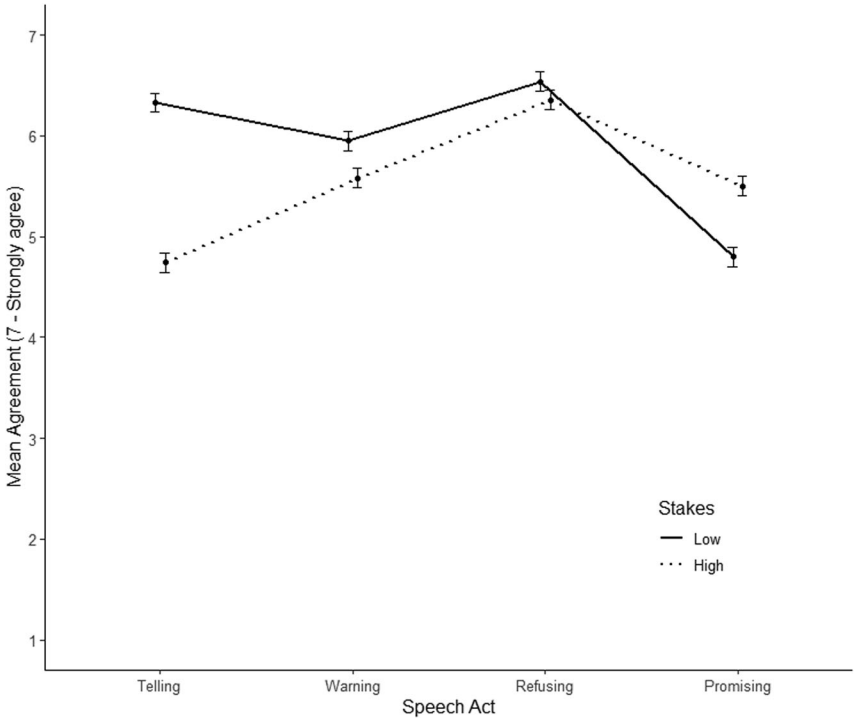

Figure 6. Line graph showing the interaction effect between stakes and speech act. There were stakes effects across all cases apart from the refusing cases. Error bars represent +/− 1 SE.

each scenario, some other element of framing, or indeed a general acquiescence bias.[20]

That said, our results provide a preliminary indication that people tend not to think that uptake is necessary for the performance of illocutionary acts, and hence that the view that uptake is necessary for the performance of illocutionary acts should not rest purely on intuitive support. On the contrary, it may be that this view relies more on theoretical than intuitive justification, and its proponents may need to explain away widespread counter-intuitions.[21]

[20]In order to test the robustness of this overall effect, then, it could be valuable to vary the experimental design in further studies. For instance, instead of the prompt simply asking whether the speaker performed the act in question, participants could be invited to select from a set of more nuanced options, such as '[Speaker] tried in vain to warn [Hearer]' or '[Speaker] warned [Hearer], but [Hearer] didn't understand'. To test whether the third-person characterisation of the speech encounter played a significant role in participants' judgements, a dynamic conversational set-up could be used, in which the participants themselves are involved in a speech encounter involving uptake failure.

[21]One response of this kind may be to argue that the very concept of illocutionary acts is a technical one, and more specifically, that it can only be properly understood within the context of Austin's distinction

5.2. Type of speech act

The results of both experiments support the hypothesis that levels of agreement vary across speech act types (in a partial vindication of De Gaynesford 2011, 2017). However, the pattern of variance observed across speech acts was somewhat different from what was hypothesised. We had predicted that the highest levels of agreement would be for the act of telling, and the lowest would be for the act of promising, with warning and refusing in between. In fact, though, the highest levels of agreement were for the act of refusing (and were almost at ceiling), followed by warning, then telling and finally promising.

Two aspects of this response pattern are particularly striking in light of the original hypothesis: the extremely high levels of agreement in the cases of refusing, and the comparatively lower levels of agreement in the cases of telling. What might explain these unexpected results? To begin with refusing, although we did not predict that our cases of refusing would provoke such strikingly high levels of agreement, further reflection suggests to us the following possible post hoc explanation, based on the relationship between refusal and autonomy. If we think of refusing as the exercising of a normative power to turn down something that is requested, offered or proposed, it is clear that the capacity to refuse, especially in certain domains (e.g. in respect of one's own body, or property), is a hallmark of personal autonomy. As such, it may be thought that refusing cannot be something that we are in any way dependent on others to do. In other words, whether or not someone refuses something that they are within their rights to refuse is up to them and nobody else – they should not need to rely on the receptiveness, competence and goodwill of their audience in order to count as having refused.

Our original hypothesis with respect to refusing – that it would lie somewhere between telling and promising with respect to levels of agreement – was based in part on the fact that refusal scenarios have been used on both sides of the debate over 'illocutionary silencing', i.e. where a lack of uptake potentially prevents speech act performance. Our results may thus be of relevance to this debate, since it appears that, as predicted by Bird, regular language-users likely do not consider speakers in such scenarios to be (illocutionarily) silenced. Perhaps, then, a case for illocutionary silencing should focus on acts other than refusal

between locution, illocution and perlocution. If successful, such an argument could challenge the kinds of appeals to ordinary intuitions surveyed in Section 1.2. While this is an interesting possibility, we must leave detailed consideration of it to future work.

– or, as mooted above, that it should rest more on theoretical resources than on ordinary judgements.

It should also be acknowledged that the response pattern may have been produced, in part, by certain features of the vignettes used in the study – specifically, the linguistic expressions used by the protagonists in each case. For example, in the refusal vignettes, the expressions 'No' and 'No, thank you' are uttered by the protagonists, and these locutions are extremely conventional linguistic devices for refusing. The close association of an illocutionary act like refusal with a locutionary act like saying 'No' may make it hard for participants to imagine how someone saying these words (performing these locutionary acts) could nevertheless fail to refuse. In contrast, the verbalisations of the protagonists in the other scenarios seem less conventionally tied to the relevant illocutionary force (telling, warning or promising) and are more ambiguous between possible illocutionary acts (for example, 'Kathleen, trust me, there are 750 beans in there' could potentially be used to tell or guess; 'There is quite a muddy patch up ahead!' could be used to warn or merely alert). Hence, as far as these go, participants may be better able to conceive of the *locutionary* act being performed (i.e. the words being uttered with a particular meaning) compatibly with different *illocutionary* acts; and this might explain why, in comparison with refusal, the cases involving warning, telling, and promising produced lower levels of agreement.

Turning to *telling*, we had expected these vignettes to elicit the highest levels of agreement, yet they elicited the second lowest levels of agreement (promising was lowest, as expected). This suggests that the speech act of telling was seen by some participants (albeit still a minority) as dependent, or possibly dependent, on uptake for its performance.

One possible line of explanation for this unexpected result would invoke the purported similarities between telling and promising that have been emphasised in particular by proponents of the 'assurance view' of testimony (Hinchman 2005; McMyler 2011; Moran 2005; Ross 1986). We saw earlier that promising has been seen by several philosophers as a clear case of an uptake-dependent act, because promising imposes normative statuses on the speaker and hearer, and these statuses are (it is claimed) partially dependent on the hearer recognising the speaker's act as a promise. According to proponents of the assurance view of testimony, the act of telling is closely akin to promising, in the sense that, in both telling and promising, speakers make themselves responsible or answerable to hearers in distinctive ways. In promising,

this involves the speaker undertaking a practical commitment (to do what was promised), and the hearer acquiring a correlative practical entitlement (to demand the speaker do what was promised). Similarly, assurance views characterise the act of telling in terms of the speaker undertaking an epistemic commitment (the commitment to justify the claim made, if challenged), and the hearer acquiring an epistemic entitlement (the entitlement to defer challenges back to the speaker). Here too, then, it may be argued that actually enacting this normative arrangement is part of what it means to have performed an act of telling, and that the arrangement actually being in place depends on uptake: a speaker who is not understood by the hearer as telling has not incurred the epistemic commitment that is characteristic of telling, and so has not succeeded in telling. If something like this conception of telling is held by (some portion of) our participants, this might explain why telling, like promising, elicited comparatively lower levels of agreement in our study.[22]

5.3. Stakes involved in scenario

The stakes effects we observed were a little more complicated. We had hypothesised that higher stakes would correlate generally with higher levels of agreement that the speech act was performed, but this effect was not observed for most speech act types, and, moreover, the results of Experiment 1 and Experiment 2 were not uniform. There was some evidence for the hypothesised effect with respect to *refusing* in Experiment 1 (i.e. stronger agreement that the speech act was performed when the stakes were higher) – at least, when all responses were considered. When the analysis was restricted to first responses, the effect emerged with respect to *promising*. This effect showed up again in Experiment 2. However, when it came to *telling* and, to a lesser extent, *warning*, scenarios with higher stakes were actually associated with *lower* agreement in both experiments (and we found no stakes effect at all for *refusing*).

These results are somewhat difficult to interpret. In particular, why, when it comes to telling, did the high stakes scenarios produce lower levels of agreement that the act was performed? Post hoc reflection suggests that this effect may be the result of a confounding feature of

[22]Though, of course, it would raise the question of why fewer consider warning and refusing to fall into the same category. In this connection, it is worth noting that philosophers who hold that illocutionary acts are partly constituted by their normative effects, such as Sbisà and Caponetto, tend to think this holds generally for all illocutionary acts – even if, as mentioned above, they invoke promising as a particularly clear example of this general principle.

our high stakes telling vignettes (reproduced below), viz., that in these vignettes it would have been easy and sensible for the speaker to do more to ensure uptake was secured:

> Shaw, Kapoor and Wilkins are detectives hunting a serial killer. They have been working on the case for two weeks, and every day a new murder takes place. So far they have made no progress towards identifying the killer. The lead detective, Shaw, sends a message to the other two, asking, "Do either of you have any ideas? Any leads at all – or even just a hunch that we could investigate?" Kapoor replies, "What about the schoolteacher, Mrs Peters? She seemed suspicious, maybe she knows more than she let on." As it happens, Wilkins has just received conclusive photographic evidence that the serial killer is Mr Jones, a local dentist who they interviewed the previous week. So Wilkins replies, "Shaw, trust me, it's Mr Jones," with the intention of telling Shaw who the killer is. However, Shaw assumes Wilkins is simply reporting a hunch. Shaw decides to bring in Mrs Peters for questioning first. [Discovering this, Wilkins realises that Shaw has taken her to be simply reporting a hunch. She realises Mr Jones is still at large.] (Not knowing this, Wilkins assumes that Shaw has taken her to be telling him, not simply reporting a hunch. She assumes he has brought in Mr Jones.)

Since Wilkins might have easily mentioned the photographic evidence, not doing so seems almost wilfully negligent and, we believe, could perhaps have led people to doubt whether Wilkins really told Shaw that Mr Jones was the killer. In contrast, in the low stakes telling case (reproduced below) there is not only less hanging on uptake being secured, but there is a clear reason why Stephen doesn't tell Kathleen the whole truth, since doing so would involve admitting to cheating:

> Stephen and Kathleen are children in the same class at school. One day their teacher brings a large jar of jelly beans to class. The teacher announces that the class should divide into pairs and guess the number of jelly beans in the jar. Whichever pair is closest wins the whole jar. Stephen and Kathleen immediately pair up, and excitedly start to discuss the task. Kathleen says "I think there are about 360 in there – or maybe something uneven, like 367." As it happens, Stephen knows exactly how many beans are in the jar, because he saw a slip of paper on the teacher's desk, reading 'Total: 750 beans'. He says, "Kathleen, trust me, there are 750 beans in there", with the intention of telling her the correct answer. Kathleen, however, assumes that Stephen is just guessing, so she decides to pick a number in between their two suggestions, and submit that as their answer. She writes down 'Stephen and Kathleen: 500 jelly beans' on a sheet of paper and hands it straight to the teacher. [Seeing this, Stephen realises that Kathleen thinks he was simply guessing. He knows they are 250 away from the right answer.] (Not seeing this, Stephen assumes that Kathleen has taken him to be telling her, not simply guessing. He assumes she wrote down '750' as their answer.)

One possibility, then, is that people's judgements about whether the speech act is performed are influenced by what they think it would be reasonable for the speaker to do in the scenario described; taking pains to secure uptake may be warranted, other things being equal, especially when the stakes are high.

Another possibility is that our findings reflect differences in the types of stakes involved in each scenario, including who is at most risk – the speaker, the hearer, or some third party.[23] We suggest, then, that it could be valuable to isolate these factors in future studies.

5.4 Speaker awareness of uptake failure

We predicted that lack of speaker awareness (where the speaker does not realise uptake failed) would be correlated with higher levels of agreement that the speech act was performed. In fact though, we found little evidence that people's judgements about speech act performance vary according to whether or not the speaker becomes aware of uptake failure.

What might explain this *lack* of an effect? One possible explanation is simply that participants judge the issue of speaker awareness to be utterly irrelevant to the issue of whether the act was performed. They may hold that the only things relevant to whether a speech act is performed are the circumstances of utterance, the intentions of the speaker, the utterance itself, and (for some participants) the way the utterance is understood. In our vignettes, these factors are all held constant across the aware and unaware variants. What distinguishes the aware and unaware variants is something that only occurs *later*, in the aftermath of the performance in question, namely the speaker either coming to realise they have not been understood as intended, or their not realising this. But perhaps that later realisation (or lack thereof) cannot retroactively undo what was done earlier, and hence the awareness condition cannot be a factor that determines whether or not the earlier act was performed. If something like this line of thinking can be attributed to our participants, it could explain why the awareness condition seemed to make no difference to participants' judgments.

An alternative explanation of why no effect of awareness was found may be that some kind of first-personal bias leads participants to erroneously treat the two variants (speaker aware vs. speaker unaware) of our vignettes as identical. That is, when it comes to the *speaker unaware* vignettes, participants may fail to effectively separate what

[23]Thank you to an anonymous reviewer for highlighting this.

they themselves know about the speech situation (in particular, that uptake has failed) from what the vignettes describe the speaker as believing (that uptake has not failed). If, in this way, participants effectively attribute to the speaker the same understanding of the speech situation that they themselves have (via epistemic egocentric or a similar bias), then the difference between the speaker aware and speaker unaware variants would not be properly appreciated, and so it would come as no surprise that the unawareness condition had no significant effects (Alexander, Gonnerman, and Waterman 2014; Nagel 2010).

6. Conclusion

The experiments reported here are only a first step in probing untutored intuitions about the uptake-dependence of speech acts. Even so, our results invite speech act theorists to consider carefully their appeals to intuition, in light of how lay judgements actually shake out. Our most robust finding concerns the sensitivity of intuitions to the type of speech act involved. As proposed by De Gaynesford (2011, 2017), then, it seems sensible for theorists to restrict claims about uptake-dependence to the speech act type under consideration. Moreover, we should expect that focusing attention on particular speech act types will lend differing degrees of intuitive support to one's theoretical position. As a case in point, our data suggest that the focus on *refusing* in the literature on illocutionary silencing may have made the debate particularly vulnerable to intuitions of uptake-independence. We also found evidence of complex stakes effects, which warrant further investigation, to isolate more fine-grained features of speech scenarios. Likewise, future studies that deploy a wider array of vignettes and experimental prompts could help verify the general tendency we observed for scepticism about the necessary role of uptake.

Disclosure statement

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References

Alexander, J., C. Gonnerman, and J. Waterman. 2014. "Salience and Epistemic Egocentrism: An Empirical Study." In *Advances in Experimental Epistemology*, edited by J. Beebe, 97–118. London: Bloomsbury Academic.

Alston, W. P. 2000. *Illocutionary Acts and Sentence Meaning*. Ithaca, NY: Cornell University Press.

Austin, J. L. 1975. *How to do Things with Words*. Oxford: Oxford University Press.

Bird, A. 2002. "Illocutionary Silencing." *Pacific Philosophical Quarterly* 83 (1): 1–15. doi:10.1111/1468-0114.00137.

Caponetto, L. 2021. "A Comprehensive Definition of Illocutionary Silencing." *Topoi* 40 (1): 191–202. doi:10.1007/s11245-020-09705-2.

De Gaynesford, M. 2011. "Speech, Action and Uptake." In *Agents and Their Actions*, edited by M. De Gaynesford, 121–137. London: Wiley-Blackwell.

De Gaynesford, M. 2017. "Uptake in Action." In *Interpreting J. L. Austin: Critical Essays*, edited by S. L. Tsohatzidis, 79–95. Cambridge: Cambridge University Press.

Hinchman, E. S. 2005. "Telling as Inviting to Trust." *Philosophy and Phenomenological Research* 70 (3): 562–587. doi:10.1111/j.1933-1592.2005.tb00415.x.

Hornsby, J. 1994. "Illocution and its Significance." In *Foundations of Speech Act Theory: Philosophical and Linguistic Perspectives*, edited by S. L. Tsohatzidis, 187–207. Abingdon: Routledge.

Hornsby, J. 1995. "Disempowered Speech." *Philosophical Topics* 23 (2): 127–147. doi:10.5840/philtopics199523211.

Hornsby, J., and R. Langton. 1998. "Free Speech and Illocution." *Legal Theory* 4 (1): 21–37. doi:10.1017/S1352325200000902.

Jacobson, D. 1995. "Freedom of Speech Acts? A Response to Langton." *Philosophy and Public Affairs* 24: 64–79. doi:10.1111/j.1088-4963.1995.tb00022.x.

Lackey, J. 2021. *The Epistemology of Groups*. Oxford: Oxford University Press.

Lakens, D., and A. R. Caldwell. 2021. "Simulation-Based Power Analysis for Factorial Analysis of Variance Designs." *Advances in Methods and Practices in Psychological Science* 4 (1): 1–14. doi:10.1177/2515245920951503.

Langton, R. 1993. "Speech Acts and Unspeakable Acts." *Philosophy and Public Affairs* 22 (4): 293–330.

Maitra, I. 2004. "Silence and Responsibility." *Philosophical Perspectives* 18 (1): 189–208. doi:10.1111/j.1520-8583.2004.00025.x.

McDonald, L. 2020. "Your Word Against Mine: The Power of Uptake." *Synthese* 199 (1-2): 3505–3526. doi:10.1007/s11229-020-02944-1.

McDowell, J. 1980. "Meaning, Communication, and Knowledge." In *Philosophical Subjects*, edited by Z. Van Straaten, 117–139. Oxford: Oxford University Press.

McGowan, M. K., A. Adelman, S. Helmers, and J. Stolzenberg. 2011. "A Partial Defense of Illocutionary Silencing." *Hypatia* 26 (1): 132–149. doi:10.1111/j.1527-2001.2010.01122.x.

McMyler, B. 2011. *Testimony, Trust, and Authority*. New York: Oxford University Press.

Mikkola, M. 2011. "Illocution, Silencing and the act of Refusal." *Pacific Philosophical Quarterly* 92 (3): 415–437. doi:10.1111/j.1468-0114.2011.01404.x.

Moran, R. 2005. "Getting Told and Being Believed." *Philosophers' Imprint* 5: 1–29.

Moran, R. 2018. *The Exchange of Words: Speech, Testimony, and Intersubjectivity*. New York: Oxford University Press.

Nagel, J. 2010. "Knowledge Ascriptions and the Psychological Consequences of Thinking About Error." *The Philosophical Quarterly* 60: 286–306. doi:10.1111/j.1467-9213.2009.624.x.

Ross, A. 1986. "Why Do We Believe What We Are Told?" *Ratio* 1: 69–88.

Sbisà, M. 2009. "Uptake and Conventionality in Illocution." *Lodz Papers in Pragmatics* 5 (1): 33–52. doi:10.2478/v10016-009-0003-0.

Searle, J. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Tabachnick, B. G., and L. S. Fidell. 2013. *Using Multivariate Statistics*. 6th ed. Boston, MA: Pearson.

Appendices

Appendix A – questionnaire I (speaker aware)

[1A – TELLING – LOW STAKES – SPEAKER AWARE]

Stephen and Kathleen are children in the same class at school. One day their teacher brings a large jar of jelly beans to class. The teacher announces that the class should divide into pairs and guess the number of jelly beans in the jar. Whichever pair is closest wins the whole jar. Stephen and Kathleen immediately pair up, and excitedly start to discuss the task. Kathleen says 'I think there are about 360 in there – or maybe something uneven, like 367'. As it happens, Stephen knows exactly how many beans are in the jar, because he saw a slip of paper on the teacher's desk, reading 'Total: 750 beans'. He says, 'Kathleen, trust me, there are 750 beans in there', with the intention of telling her the correct answer. Kathleen, however, assumes that Stephen is just guessing, so she decides to pick a number in between their two suggestions, and submit that as their answer. She writes down 'Stephen and Kathleen: 500 jelly beans' on a sheet of paper and hands it straight to the teacher. Seeing this, Stephen realises that Kathleen thinks he was simply guessing. He knows they are 250 away from the right answer.

Please use the scale below[24] to rate your agreement or disagreement with the following statement:

Stephen told Kathleen that there were 750 jelly beans in the jar.

1	2	3	4	5	6	7
Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Agree	Strongly disagree

[1C – TELLING – HIGH STAKES – SPEAKER AWARE]

Shaw, Kapoor and Wilkins are detectives hunting a serial killer. They have been working on the case for two weeks, and every day a new murder takes place. So far they have made no progress towards identifying the killer. The lead detective,

[24]The same response scale was used for all vignettes. Scores were reversed for analysis.

Shaw, sends a message to the other two, asking, 'Do either of you have any ideas? Any leads at all – or even just a hunch that we could investigate?' Kapoor replies, 'What about the schoolteacher, Mrs Peters? She seemed suspicious, maybe she knows more than she let on'. As it happens, Wilkins has just received conclusive photographic evidence that the serial killer is Mr Jones, a local dentist who they interviewed the previous week. So Wilkins replies, 'Shaw, trust me, it's Mr Jones', with the intention of telling Shaw who the killer is. However, Shaw assumes Wilkins is simply reporting a hunch. Shaw decides to bring in Mrs Peters for questioning first. Discovering this, Wilkins realises that Shaw has taken her to be simply reporting a hunch. She realises Mr Jones is still at large.

Please use the scale below to rate your agreement or disagreement with the following statement:

Wilkins told Shaw that Mr Jones was the killer.

[2A – WARNING – LOW STAKES – SPEAKER AWARE]

Anna and Paul are friends. One day, while walking together in the countryside near Anna's house, Anna remembers that there is a particularly muddy section of the track up ahead. Anna herself quite enjoys the mud, but other walking partners have found it messy and slippery. So she says to Paul, 'There is quite a muddy patch up ahead!' with the intention of warning him, in case he would like to turn back. What Anna has forgotten, however, is that Paul shares her enjoyment of muddy walks, and they have in fact taken a number of enjoyable muddy walks together in the past. Paul has not forgotten this, so he assumes that Anna is simply telling him about the mud, as encouragement to keep on going a bit longer. When Anna sees Paul smile and increase his walking pace, she realises that he has not taken what she said as a warning.

Please use the scale below to rate your agreement or disagreement with the following statement:

Anna warned Paul about the mud.

[2C – WARNING – HIGH STAKES – SPEAKER AWARE]

James and Mary are on a date at the zoo. They want to see a lion, but all four are sleeping in the far corner of their enclosure. James suggests that Mary wait on a bench nearby while he goes to buy them each an ice cream. On his way back, James thinks he sees an escaped lion making its way towards Mary. 'There's a lion behind you!' he shouts, meaning to warn her. However, Mary is sure that all of the lions are still safely inside their enclosure. She assumes James is simply telling her about the lion who has woken up and is prowling around. 'Yes, it's magnificent, isn't it?' she replies calmly, without moving. James realises that Mary has not taken what he said as a warning.

Please use the scale below to rate your agreement or disagreement with the following statement:

James warned Mary about the lion.

[3A – REFUSING – LOW STAKES – SPEAKER AWARE]

John is a famous chef, whose ego has been inflated by restaurant critics and the food industry. As a result, he believes that no-one can get enough of his wonderful cooking. One day John is in the restaurant kitchen when one of the waitresses, Caroline, comes in. John offers Caroline some food. Caroline says 'No thank you' intending to politely refuse the food. Because of John's extreme arrogance, he does not believe

Caroline would ever refuse his food. Instead, he assumes Caroline is politely accepting it. So John continues preparing the food for Caroline. Caroline realises that she is not getting through to John, who still seems to think she is accepting the offer of food.

Please use the scale below to rate your agreement or disagreement with the following statement:

Caroline refused John's offer of food.

[3C – REFUSING – HIGH STAKES – SPEAKER AWARE]

Mark and Emily have been on a date. Mark walks Emily back to her home and she invites him in for a drink. When they get indoors, Mark makes a sexual advance on Emily. Emily says 'No' intending to refuse Mark's advances. But Mark does not recognise this as a refusal. He believes Emily is coyly consenting, and he takes this as a reason to continue making advances. Emily realises that she is not getting through to Mark, who still seems to think she is consenting to his advances.

Please use the scale below to rate your agreement or disagreement with the following statement:

Emily refused Mark's sexual advances.

[4A – PROMISING – LOW STAKES – SPEAKER AWARE]

Julie and Noah are friends at university. They have both been invited to the party of another student neither of them knows very well. Noah is aware that Julie suffers from high levels of social anxiety and probably wouldn't want to attend the party unless he comes too. So, when Julie asks Noah about the party, he says, 'I'll be there!' with the aim of making a promise to Julie. However, Julie does not realise that Noah is promising. She thinks he is only telling her that he intends to go. She says, 'Can you send me a message when you leave home, so I know you're definitely going?' Noah realises that Julie hasn't taken him to be promising but only telling her of his intention to attend.

Please use the scale below to rate your agreement or disagreement with the following statement:

Noah promised Julie that he would be at the party.

[4C – PROMISING – HIGH STAKES – SPEAKER AWARE]

William has recently been promoted and put in charge of recruitment at Exe Industries, a large company. Before his promotion, his friend Grace applied for a job at Exe Industries but was turned down. William knows that Grace was desperate for the job because Exe Industries is the only employer that can sponsor her visa, allowing Grace and her three young children to stay in the country. William wants to use his new position to help his friend. So he says, 'We have a new position opening next week. If you try again, you'll get the job', with the intention of promising Grace that he will see to it that Grace gets the job. However, Grace has forgotten that William was promoted and is now in charge of recruitment, so she assumes William is just advising her to keep trying. She replies, 'OK, I'll think about it' wondering whether her time would be better spent planning the move back to her home country. William realises that Grace has taken him to be giving advice, rather than promising her the job.

Please use the scale below to rate your agreement or disagreement with the following statement:

William promised Grace the job.

Appendix B – questionnaire II (speaker unaware)

[1B – TELLING – LOW STAKES – SPEAKER UNAWARE]

Stephen and Kathleen are children in the same class at school. One day their teacher brings a large jar of jelly beans to class. The teacher announces that the class should divide into pairs and guess the number of jelly beans in the jar. Whichever pair is closest wins the whole jar. Stephen and Kathleen immediately pair up, and excitedly start to discuss the task. Kathleen says 'I think there are about 360 in there – or maybe something uneven, like 367'. As it happens, Stephen knows exactly how many beans are in the jar, because he saw a slip of paper on the teacher's desk, reading 'Total: 750 beans'. He says, 'Kathleen, trust me, there are 750 beans in there', with the intention of telling her the correct answer. Kathleen, however, assumes that Stephen is just guessing, so she decides to pick a number in between their two suggestions, and submit that as their answer. She writes down 'Stephen and Kathleen: 500 jelly beans' on a sheet of paper and hands it straight to the teacher. Not seeing this, Stephen assumes that Kathleen has taken him to be telling her, not simply guessing. He assumes she wrote down '750' as their answer.

Please use the scale below[25] to rate your agreement or disagreement with the following statement:

Stephen told Kathleen that there were 750 jelly beans in the jar.

1	2	3	4	5	6	7
Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree

[1D – TELLING – HIGH STAKES – SPEAKER UNAWARE]

Shaw, Kapoor and Wilkins are detectives hunting a serial killer. They have been working on the case for two weeks, and every day a new murder takes place. So far they have made no progress towards identifying the killer. The lead detective, Shaw, sends a message to the other two, asking, 'Do either of you have any ideas? Any leads at all – or even just a hunch that we could investigate?' Kapoor replies, 'What about the schoolteacher, Mrs Peters? She seemed suspicious, maybe she knows more than she let on'. As it happens, Wilkins has just received conclusive photographic evidence that the serial killer is Mr Jones, a local dentist who they interviewed the previous week. So Wilkins replies, 'Shaw, trust me, it's Mr Jones', with the intention of telling Shaw who the killer is. However, Shaw assumes Wilkins is simply reporting a hunch. Shaw decides to bring in Mrs Peters for questioning first. Not knowing this, Wilkins assumes that Shaw has taken her to be telling him, not simply reporting a hunch. She assumes he has brought in Mr Jones.

Please use the scale below to rate your agreement or disagreement with the following statement:

Wilkins told Shaw that Mr Jones was the killer.

[2B – WARNING – LOW STAKES – SPEAKER UNAWARE]

[25]The same response scale was used for all vignettes. Scores were reversed for analysis.

Anna and Paul are friends. One day, while walking together in the countryside near Anna's house, Anna remembers that there is a particularly muddy section of the track up ahead. Anna herself quite enjoys the mud, but other walking partners have found it messy and slippery. So she says to Paul, 'There is quite a muddy patch up ahead!' with the intention of warning him, in case he would like to turn back. What Anna has forgotten, however, is that Paul shares her enjoyment of muddy walks, and they have in fact taken a number of enjoyable muddy walks together in the past. Paul has not forgotten this, so he assumes that Anna is simply telling him about the mud, as encouragement to keep on going a bit longer. When Anna sees Paul smile and increase his walking pace, she assumes he has taken what she said as a warning but has decided to ignore it, perhaps because he wants to seem tough.

Please use the scale below to rate your agreement or disagreement with the following statement:

Anna warned Paul about the mud.

[2D – WARNING – HIGH STAKES – SPEAKER UNAWARE]

James and Mary are on a date at the zoo. They want to see a lion but all four are sleeping in the far corner of their enclosure. James suggests that Mary wait on a bench nearby while he goes to buy them each an ice cream. On his way back, James thinks he sees an escaped lion making its way towards Mary. 'There's a lion behind you!' he shouts, meaning to warn her. However, Mary is sure that all of the lions are still safely inside their enclosure. She assumes James is simply telling her about the lion who has woken up and is prowling around. 'Yes, it's magnificent, isn't it?' she replies calmly, without moving. James assumes that Mary has taken what he said as a warning but is staying calm and still so the lion doesn't attack her.

Please use the scale below to rate your agreement or disagreement with the following statement:

James warned Mary about the lion.

[3B – REFUSING – LOW STAKES – SPEAKER UNAWARE]

John is a famous chef, whose ego has been inflated by restaurant critics and the food industry. As a result, he believes that no-one can get enough of his wonderful cooking. One day John is in the restaurant kitchen when one of the waitresses, Caroline, comes in. John offers Caroline some food. Caroline says 'No thank you' intending to politely refuse the food. Because of John's extreme arrogance, he does not believe Caroline would ever refuse his food. Instead, he thinks Caroline is politely accepting it. So John continues preparing the food for Caroline. Caroline reasons that John has taken what she said as a refusal, but is carrying on preparing the food for her anyway.

Please use the scale below to rate your agreement or disagreement with the following statement:

Caroline refused John's offer of food.

[3D – REFUSING – HIGH STAKES – SPEAKER UNAWARE]

Mark and Emily have been on a date. Mark walks Emily back to her home and she invites him in for a drink. When they get indoors, Mark makes a sexual advance on Emily. Emily says 'No' intending to refuse Mark's advances. But Mark does not recognize this as a refusal. He believes Emily is coyly consenting, and he takes this as a reason to continue making advances. Emily reasons that Mark has taken what she said as a refusal, but is carrying on making sexual advances anyway.

Please use the scale below to rate your agreement or disagreement with the following statement:

Emily refused Mark's sexual advances.

[4B – PROMISING – LOW STAKES – SPEAKER UNAWARE]

Julie and Noah are friends at university. They have both been invited to the party of another student neither of them knows very well. Noah is aware that Julie suffers from high levels of social anxiety and probably wouldn't want to attend the party unless he comes too. So, when Julie asks Noah about the party, he says, 'I'll be there!' with the aim of making a promise to Julie. However, Julie does not realise that Noah is promising. She thinks he is only telling her that he intends to go. She says, 'Can you send me a message when you leave home, so I know you're definitely going?' Noah assumes that Julie has taken him to be promising but is still worried that he might break his promise.

Please use the scale below to rate your agreement or disagreement with the following statement:

Noah promised Julie that he would be at the party.

[4D – PROMISING – HIGH STAKES – SPEAKER UNAWARE]

William has recently been promoted and put in charge of recruitment at Exe Industries, a large company. Before his promotion, his friend Grace applied for a job at Exe Industries but was turned down. William knows that Grace was desperate for the job because Exe Industries is the only employer that can sponsor her visa, allowing Grace and her three young children to stay in the country. William wants to use his new position to help his friend. So he says, 'We have a new position opening next week. If you try again, you'll get the job', with the intention of promising Grace that he will see to it that Grace gets the job. However, Grace has forgotten that William was promoted and is now in charge of recruitment, so she assumes William is just advising her to keep trying. She replies, 'OK, I'll think about it' wondering whether her time would be better spent planning the move back to her home country. William assumes Grace has taken him to be promising but is trying not to sound too excited.

Please use the scale below to rate your agreement or disagreement with the following statement:

William promised Grace the job.