The social cost of maxims violation: Pragmatic behavior informs speaker evaluation

Classic pragmatic theories treat communication as a cooperative enterprise ([1]), showing how listeners draw *pragmatic* inferences to compute a speaker's intended message. At the same time, work in sociolinguistics ([2-3]) and social psychology ([4]) has shown that interlocutors systematically draw *social* inferences from speech — i.e., they form impressions about the interlocutor's social or personal qualities: such inferences are usually independent of what the speaker intended to convey, and have thus mostly escaped the domain of pragmatics. Bridging pragmatic and social approaches to communication, we show that a speaker's choice to obey or violate the pragmatic maxims of Relevance and Informativeness — as well as the reasons behind these choices (Inability vs. Unwillingness) — affect how the speaker is perceived, revealing a connection between pragmatic cooperativeness and social evaluation.

EXP1. A 2x2 design was implemented in a conversation between two co-workers, Kim and John, in which John talked about a recent skiing vacation (see Table 1). In the Relevance manipulation, John either addressed Kim's dilemma, when she expressed interest in a skiing vacation (+**R**elevance); or failed to address it, when she expressed interest in a beach vacation (-**R**elevance)**.** In the Informativeness manipulation, John either provided a detailed description of his vacation (+**I**nformativeness), or simply disclosed its location (-**I**nformativeness). Before his description, John claimed familiarity with all places mentioned by Kim; this ensured that his uncooperative responses would be attributed to *unwillingness* to provide the needed information. Participants evaluated John with a 1(min)-7(max) rating targeting two dimensions central to person perception: Warmth — reflecting someone's intentions towards others — and Competence — reflecting their individual skills and intellectual standing ([4]; see Table 1). We predicted that irrelevant utterances, by completely ignoring Kim's request, should be seen as especially uncooperative, and thus elicit a high social penalty for the speaker in both Competence and Warmth. Under-informative ones, by still retaining some value for the listener, might instead incur a lesser cost. The study consisted of a single trial: 400 subjects were recruited on MTurk (100 per 2x2 cell). Results are shown in **Fig 1**. Two-way ANOVAs performed separately for Competence and Warmth showed that both Competence and Warmth were influenced by Relevance, with John rated as both more competent and warmer when his contribution was relevant (all *ps* < .001). Competence only was affected by Informativeness (*p <.05*) with more informative utterances eliciting higher ratings than less informative ones.

EXP2. Exp2 consisted of a partial replication of Exp1: the Informativeness manipulation was retained, but only irrelevant utterances were included. Contrary to Exp1, these were introduced by the phrase "I've never been to these places", indicating that the maxim violation was due to *inability,* and not *unwillingness.* As they are compatible with the speaker being well-intentioned towards the interlocutor, we expect *inability*-driven violations to be less socially costly than *unwillingness*-driven ones in terms of Warmth. *2*00 subject were recruited on MTurk. The average ratings for Exp2 and the —Relevance condition in Exp1 are displayed in **Fig 2.** Separate two-way ANOVAs were performed for Warmth and Competence on pooled data from Exp2 and the —Relevance data from Exp1 (factors: Informativeness and Experiment). A main effect of Experiment was found for Warmth (*p<.001)*, with irrelevant responses yielding higher warmth ratings when driven by inability. No effect was found on Competence.

DISCUSSION. These results suggest that listeners draw social inferences based on their interlocutor's conversational behavior, with the most disruptive pragmatic violations — i.e., Relevance — emerging as the most socially costly. Moreover, listeners reason about the cause that might have driven a violation, as shown by the mitigated Warmth-related penalty of inability-driven Relevance violations. A lingering puzzle concerns why the social effects of Informativeness are only observed for Competence: a possibility is that the choice of disclosing more information enhanced John's perceived individual ability as a speaker, but not his perceived propensity to help out Kim. We predict that, by making the under-informative condition more disruptive to the interlocutor's goals, violations of Informativeness should also affect Warmth. In sum, these findings suggest that, even after a brief exposure to someone's conversational behavior, people draw social inferences about the speaker — and do so by reasoning along the same principles that inform pragmatic inferences in the Gricean framework.

Table 1: Manipulations and dialogue for Exp 1

Speaker	Utterance	Manipulation
Kim	**Either:** I'd like to go on a skiing vacation. I'm thinking Austria, Switzerland or Italy.	Sets up + Relevance of John's description
	Or: I'd like to go on a Caribbean vacation. I'm thinking Antigua, Barbados or Bahamas.	Sets up — Relevance of John's description
John	I've been to all these places.*	
John	**Either: I** recently went to Zermatt, Switzerland. Best slopes of all places I've been to.	+ Informativeness
	Or: I recently went to Zermatt, Switzerland.	— Informativeness

*Exp2: "I haven't been to any of these places"

Table 2: Questions for Competence vs. Warmth,

Question	Dimension
How knowledgeable do you think John is in this conversation?	Competence
How competent do you think John is as a person?	
How considerate towards Kim do you think John is in this conversation?	Warmth
How likable do you think John is as a person?	

Fig.1: Average response ratings for Exp 1

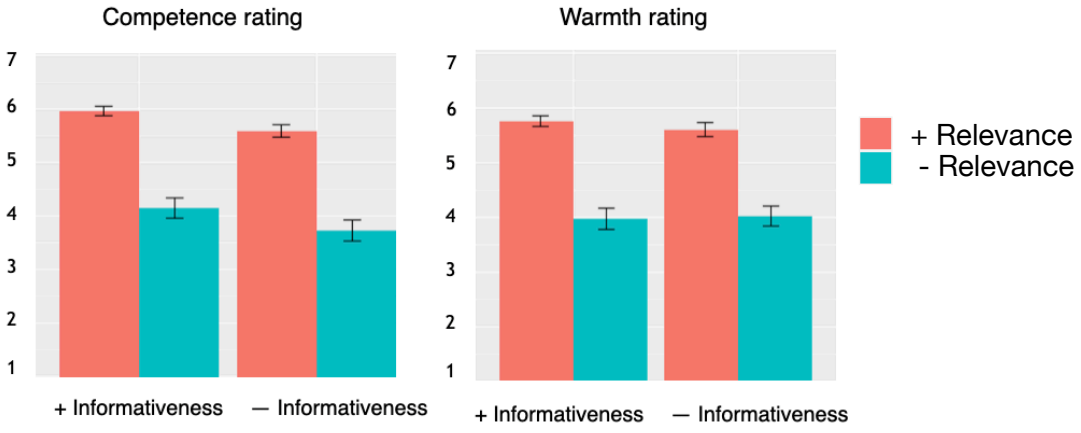
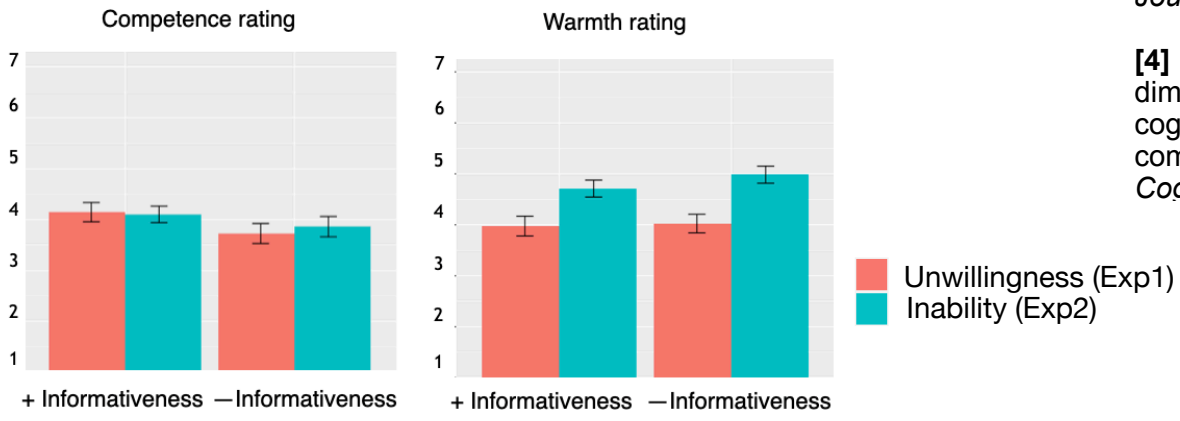


Fig. 2: Average ratings for Exp 1 (—Relevance only) vs. Exp 2



References

[1] Grice, 1975. Logic and Conversation. *Syntax and Semantics, vol.3.*

[2] Campbell-Kibler, 2007. Accent, (ING), and the Social Logic of Listener Perceptions. *American Speech.*

[3] Eckert 2008. Variation and the indexical field. *Journal of Sociolinguistics.*

[4] Fiske, 2007. Universal dimensions of social cognition: warmth and competence. *Trends in Cognitive Sciences.*