Social identity & charity: when less precise speakers are held to stricter standards

Expanding work at the socio-semantics interface ([1-2-3] i.a.), we explore the impact of social information on imprecision resolution in a T(ruth)-V(alue) J(udgment) task. We find that imprecise statements from speakers socially expected to be less precise are strikingly held to more stringent evaluation standards, suggesting a more nuanced interplay between social and semantic meaning than previously thought, while shedding new light on how social factors impact TVJ responses.

Recent work unveiled a bi-directional relationship between social and pragmatic properties of (im-)precision with numerals: comprehenders infer social properties from speakers’ levels of (im)precision ([2]), and conversely adjust their precision thresholds based on speaker identity – as recently shown in in a picture selection task ([4]). In this study, participants saw numeral utterances (It’s 3 o’clock) along with a phone displaying a slightly divergent number (“2:51”), as well as a face down phone; they had to select which phone they thought the speaker was basing their utterance on. Screens showing divergent numbers were selected more often with speakers embodying a Chill (vs. Nerdy) persona, indicating higher propensity to accept imprecise numerals from speakers socially expected to speak less precisely – especially for comprehenders who did not themselves identify with the speaker’s stereotypical traits. These findings raise the question as to whether speaker identity similarly affects the acceptance of an imprecise description when comprehenders are conversely asked to determine whether a given description fits a state of affairs – the type of inference typically involved in TVJ tasks, a standard experimental paradigm for interpretation judgements ([5-6-7]). Beyond offering a potential cross-paradigm validation of [4]’s findings, this extension is also of general methodological value, as it constitutes a first step towards investigating the role of social information in TVJ tasks – a widely used measure in experimental studies of meaning, whose sensitivity to speaker identity considerations is uncharted.

**Design.** Following [4], we presented dialogues with one character asking a question and the other providing a numeral utterance response after checking their phone. Crossing two factors in a 2x3 design, Speaker Persona and Match were manipulated. The former was between subjects, with levels Nerdy, expected to speak precisely, and Chill, expected to speak imprecisely (Fig.1), normed for precision expectations. The latter manipulated how closely the uttered numeral and the number on the phone matched, with 3 levels (Fig.3): Match; Mismatch; or Imprecise (with a 5-19% range of divergence). Participants (n=196; via Prolific) assessed whether, given the number on the screen, the utterance was Right or Wrong. 24 items were counterbalanced across 4 lists, each with 6 items in Match and Mismatch, and 12 in Imprecise (+ 24 fillers). At the end, participants indicated on a 1(min)-10(max) scale how precisely they expected the character to speak, and to what extent they saw themselves in the character’s stereotype (=Similarity). If social information affects TVJs for imprecise numerals in the same way as picture selection choices ([4]), imprecise descriptions by Chill speakers should be accepted more often, leading to lower rates of WRONG responses (H1). Persona effects should also be more prominent for participants who do not identify with the speaker (H2). **Results.** Having confirmed ceiling/floor WRONG response rates for Match/Mismatch and intermediate ones for Imprecise, we fit a ME logistic regression on the Imprecise condition data with Persona as a predictor. The rate of WRONG responses is higher for Chill than for Nerdy speakers ($\beta=2.17$, p<.05; Fig.3A), suggesting
more stringent precision thresholds for the former – contra the findings in [4] – even though Chill speakers were still rated to be less precise ($p < 0.001$ in the post-questionnaire; Fig.3B).

To test possible modulation by participants’ own identity, we fit a second ME model on the Imprecise condition data looking at the interaction of Persona (ref=Chill) and Similarity (ref=1) (Fig.4A): we find a simple effect of Persona at low levels of similarity, with a higher rate of wrong responses for Chill ($\beta=3.17, p<.05$); and a near-significant interaction Persona/ Similarity ($\beta=0.42, p=.08$), with the persona effect decreasing as participant-speaker similarity increases (as in [4]). Again precision expectations show the opposite pattern of choices: Nerdy speakers license higher precision expectations than Chill at low Similarity (Fig.4B).

**Discussion.** These findings provide further evidence that the social identity of the speaker affects comprehenders’ behavior in a task that requires computing an imprecision threshold. Contrary to what happens in picture selection [4], in a TVJ task, comprehenders are less inclined to accept imprecise statements from Chill speakers; in both paradigms, however, the persona effect is maximally prominent for participants who don’t identify with the speaker (similar to phonetic processing [8-9]).

We propose that the different patterns are grounded in the distinct epistemic implications of rejecting an imprecise numeral in the two paradigms. While in picture selection ([4]) rejecting the imprecise number is compatible with taking the speaker to be truthful, a wrong choice in a TVJ is crucially prejudicial – it commits the respondent to implying that the speaker is violating Quality. Accordingly, Chill speakers’ stereotype as imprecise makes it easier to see them as violating Quality than Nerdy speakers, socially perceived as more accurate, leading respondents to be more charitable towards Nerdy than Chill speakers – even though numerals uttered by the former are actually expected to be more precise, and thus (in principle) more likely to prompt a Wrong response. We conclude that social information can impact comprehenders’ assessment of utterances in two different ways: it can yield adjustments in precision thresholds with response behavior aligned with precision expectations (as in [4]); or it can yield higher levels of charity towards one persona as opposed to the other, in contrast with precision expectations. This shows that social information affects TVJs’, and that these effects might go in the opposite direction of those observed in other tasks tapping into meaning intuitions, complementing methodological work investigating how different experimental tasks inform our understanding of interpretation ([10-11]).