

Title

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It has been thoroughly demonstrated that a hearer can and will use a speaker's utterances to draw inferences about elements of that speaker's social identity. With social meaning findings established, this study aims to investigate social meaning in an opposite direction: to what extent do a hearer's beliefs about a speaker's beliefs license expectations about their utterances and do any such expectations affect language processing in real time? To assess this, the present study consists of two experiments regarding a particular subset of English role nouns that feature gender marking (e.g., saleswoman/ salesperson/ salesman). The choice to select the gender-neutral form of a role noun like this over a gender-marked alternative has been associated with more progressive gender ideologies (Papineau et al., 2022), an example of social meaning. In this study, participants are introduced to fictitious characters, presented as being either conservative or progressive. Experiment 1 is a forced-choice production task wherein participants guess which of the role noun variants the fictitious speaker would use to fill in the blank in a sentence. Experiment 2 is a self-paced reading processing task that presents participants with the same sentences, featuring either gender-neutral or gender-marked role nouns, delivered by the same fictitious characters. Together, these studies aim to investigate social meaning in reverse. If hearer beliefs about a speaker's beliefs affect hearer expectations, more gender-neutral role

The present study intertwines aforementioned notions of social meaning and speaker-specific language processing to further explore the case of marking progressiveness via English role noun variants (saleswoman/salesperson/salesman) as a case study in exploring social meaning in reverse e to what extent is this belief-marking linguistic choice expected in others based on perceptions of their beliefs? The study contains two experiments e a forced-choice production task and a self-paced reading task. Together, these experiments will investigate whether this social meaning is attributed to fictitious characters with specified political beliefs (Experiment 1) and whether speaker-specific expectations regarding the use of these variants manifest in real-time language processing (Experiment 2).

- (1) It is predicted that gender-neutral role noun forms will be attributed more often to progressive characters than to conservative characters.
- (2) Consistent with findings that speaker-specific information influences language in real time, it is also predicted that these expectations will emerge in real-time language processing;

These stimuli follow the form [NAME] is a [ROLE NOUN] from [PLACE], such as: Samantha is a saleswoman/ salesperson/salesman from the USA. The names utilized in this experiment were those used by Papineau et al. (2022) as well. In the production task, [PLACE] was always “the USA” to avoid any state-related associations affecting participant judgments in the task. There were 14 critical role nouns in the experiment, each of which can be marked as female/ neutral /male (e.g., saleswoman/ salesperson/ salesman). These were counter-balanced across two lists such that each participant saw each critical item only once; as such, half the participants would see a given critical item with the stereotypically male name and the other half would see that item with the stereotypically female name. In addition to these 14 critical trials, each participant encountered 66 filler sentences of varying types, prompting choices related to binary gender-marked role nouns (e.g., actor/actress), ungendered role

nouns (e.g., author/writer/journalist), grammaticality (e.g., running/run/ran), and semantic fit (e.g., fountain/ pool/puddle).

Any choices that were incongruent with the (assumed) gender of the subject of the sentence were removed (e.g., Samantha is a congressman from the USA). 144 responses were removed for this reason, leaving 2264 data points for analysis. There was a striking imbalance in these responses: 8 featured a male subject with a female role noun and 136 featured a female subject with a male role noun.⁵ This particular finding will be discussed in more detail in the discussion section, but the responses are omitted from the main analysis to permit a simpler neutral vs. marked congruent analysis. Logistic mixed effects models were used for analyses, with response neutrality as a binary outcome (1 = neutral [congressperson], 0 = marked-congruent [congresswoman]). Predictor variables were the speaker's ideology (conservative vs. progressive) and participant SRQ score. Random intercepts were included for participants and random intercepts and slopes (by speaker ideology) for items. All models utilize sum coding for the speaker ideology factor.

A logistic mixed effects model was fit to the data, with response neutrality as the outcome and speaker's ideology, participant SRQ, and their interaction as predictors. Full model results appear in (3).

(3)

	Estimate	Std. Error
(intercept)	0.14	0.37
Speaker ideology [Progressive]	1.21	0.15
Participant ZRQ	-0.09	0.13
Speaker ideology [Progressive]* Participant SRQ	-0.26	0.13

A strong effect of speaker ideology emerged whereby the gender-neutral form of the role noun was attributed to progressive speakers significantly more than to conservative speakers (P1a). This effect interacts with individual participant ideology as well, with more progressive participants attributing gender-neutral role nouns at a higher rate to progressive speakers and at a lower rate to conservative speakers than their more conservative participant counterparts (P1b). Since the subject of the sentence was systematically varied within-subjects between stereotypically male and stereotypically female names, as was the gender of the fictitious speaker between-subjects, an exploratory additional model was run with subject gender and speaker gender as fixed effects alongside speaker ideology and participant SRQ (and all interactions); the model included random intercepts for item.

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