

Gender agreement reinforces grammatical gender biases: Evidence from French epicenes

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In languages with gender systems, grammatical gender has been repeatedly shown to bias the interpretation of referent gender for human-denoting nouns. For instance, grammatically masculine nouns tend to be interpreted as referring to men even when generically intended [1]. These findings have been used to motivate gender-fair language. However, the role of gender agreement in these effects remains understudied. We investigate whether agreement reinforces grammatical gender biases in French. As a test case we use epicene nouns [2], which have a fixed grammatical gender—feminine (e.g., *une personne* ‘a person’) or masculine (e.g., *un individu* ‘an individual’)—but a generic meaning.

We use 18 pairs of masculine/feminine epicenes, and contrast sentences featuring these nouns with agreement on the determiner only (baseline) vs with an additional gender marker, which is present orthographically (ortho agreement) or both orthographically and phonologically (ortho-phono agreement) (sample sextuplet in Table 1). In two pre-registered experiments, each with 108 native speakers, the task is to guess the gender of the referent using a 7-point Likert scale (1=male, 7=female). Each participant is presented with one sentence for each sextuplet and an equal number of sentences in each of the six conditions. In Experiment 1 we use written stimuli and in Experiment 2 spoken ones.

The findings of both experiments not only confirm that interpretation is biased by grammatical gender [2] but they also show that agreement strengthens this effect, in both modalities: masculine epicenes result in more male-biased representations than feminine epicenes, and the difference between masculine and feminine epicenes is increased in the presence of additional agreement markers (Figure 1). Furthermore, orthographic agreement appears to influence auditory processing. In Experiment 2, the presence of additional agreement markers increases gender biases even when these markers are not audible. This is in line with findings that orthographic representations are activated in listening [3].

These results provide the first evidence for grammatical gender biases in the spoken modality in French, adding to a body of research on other languages (e.g. [4]). More importantly, we find that gender agreement strengthens these biases. This result has methodological and practical implications. Agreement patterns must be carefully controlled for in experimental stimuli when examining gender bias. This also underscores the importance of gender-fair strategies targeting agreement, such as closest conjunction agreement [5].

References

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Figures and Tables

Figure 1: Results of Experiments 1-2

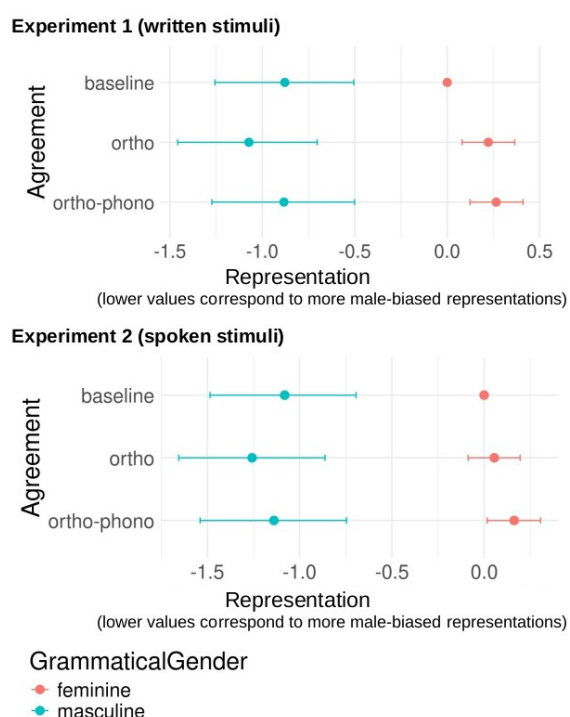


Table 1: Sample of stimuli

Gender agreement	Masculine epicene	Feminine epicene
baseline	<u>Un</u> talent de la chanson a présenté son dernier album. 'A singing talent/star presented their last album.'	<u>Une</u> vedette de la chanson a présenté son dernier album.
ortho	<u>Un</u> talent de la chanson a été invité pour présenter son dernier album. 'A singing talent/star was invited to present their last album.'	<u>Une</u> vedette de la chanson a été invitée pour présenter son dernier album.
ortho-phono	<u>Un</u> talent de la chanson a été inclus pour présenter son dernier album. 'A singing talent/star was included to present their last album.'	<u>Une</u> vedette de la chanson a été incluse pour présenter son dernier album.

Explanation for Figure 1: Estimates (relative to feminine gender in the baseline condition) are shown on the latent scale assumed in the Bayesian ordinal regression modeling judgment data. Points show posterior means (except for feminine gender in the baseline condition, whose interpretation is fixed at zero); error bars indicate 90% credible intervals.