

## Gender agreement with coordinated nouns: has French masculine been overrated?

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Linear order has been shown to play a role for gender agreement in Spanish and Portuguese (Demonte et al, 2012; Villavicencio et al, 2005), as well as in South Slavic languages (Willer-Gold et al, 2017). According to Corbett (1991) and most French grammars, French is an exception among Romance languages in only using gender resolution (to masculine) and not closest conjunct agreement (CCA) when Nouns with different genders are coordinated (*Le garçon et la fille sont beaux/\*belles*. 'the boy and the girl are beautiful.<sub>.M.PL/\*F.PL</sub>'). However, we show that CCA (to feminine) is frequent in contemporary French with attributive Adjectives and even preferred in certain cases (An 2020). In a corpus study (131 tokens 'D Adj Nfp et Nmp' and 222 'D Nmp et Nfp Adj' randomly selected in frWAC (Baroni et al, 2009), we found a significant effect of Adj position: 96.95% of prenominal Adj observe CCA (feminine) (1) while only 42.34% for postnominal Adj (2).

(1) les différentes villes et pays `the.PL different.F.PL city.F.PL and country.M.PL`

(2) les objectifs et caractéristiques essentielles `the.PL objective.M.PL and characteristic.F.PL essential.F.PL`

We ran two acceptability rating experiments with plural nouns. In E1, we had 24 experimental items with 3 factors (3): Adj position, Adj gender, N animacy, 12 control items (grammatical and ungrammatical with attraction errors, (2)) and 24 distractors. The closest N was always feminine. We had 40 participants (recruited via the Risc) on Ibex rating on a 0-10 scale.

(3) **pre,fem/masc,+hum**: De nouvelles/nouveaux étudiantes et étudiants sont déjà en stage.

**post,fem/masc,+hum**: Des étudiants et étudiantes nouvelles/nouveaux sont déjà en stage.

'Some new.F.PL/M.PL student.F.PL and student.M.PL are already in internship'

**pre,fem/masc,-hum**: De nouvelles maisons et immeubles ont déjà fait l'objet de rénovations.

**post,fem/masc,-hum**: Des immeubles et maisons nouvelles/nouveaux ont déjà fait l'objet de rénovations.

'Some new.F.PL/M.PL house.F.PL and building.M.PL have already been renovated'

(4) **control,+/-gram**: Le fils de la voisine est content/contente d'aller à l'école.

'the son.M.SG of the neighbor.F.SG is happy.M.SG/F.SG to go to school'

In E1 (figure 1), the experimental items are judged better than attraction errors (mean=3.21), but worse than grammatical controls (mean=9.55). The feminine A (mean=6.9 in prenominal, mean=6.62 in post-nominal position) is also preferred over the masculine A (mean=5.40 in prenominal position, mean=6.17 in post-nominal position), and this preference is stronger in the prenominal position. We analyzed the effects of directionality with a mixed-effects ordinal regression model using the `clmm()` (Christensen 2018) function. Fixed effects in this model are Directionality (pre vs. post) × Gender (Am vs. Af). We also included maximal random effects for items and subjects, including random correlations. There is a significant effect of gender ( $p=0.03$ ). Af are more acceptable than Am. The interaction between gender and position is significant ( $p=0.001$ ). CCA is particularly preferred in prenominal position, which is consistent with our corpus data. We then tested the effects of humanness in each condition. In prenominal position, Af are preferred for both human and non-human Ns. However, in postnominal position, Am are preferred for human Ns and Af for non-human Ns.

In Exp.2 (figure 2), we tested predicative agreement with the same design (5). Contrary to attributive Am, Vm was always preferred, and there was a small interaction with position (CCA

with Vf was rated higher in V-Nf-et-Nm condition). But this effect is not significant. There was no interaction with humanness.

**(5) pre,fem/masc,+hum:** Je me demande quand seront inscrits/inscrites les étudiantes et les étudiants.

**post,fem/masc, +hum:** Je me demande quand les étudiants et les étudiantes seront inscrits/inscrites.

'I wonder when the student.<sub>mp</sub> and the student.<sub>fp</sub> will.be registered.<sub>f.pl/m.pl</sub>

**pre,fem/masc,-hum:** Je me demande quand seront remis/remises les notes et les résultats.

**post,fem/masc, -hum:** Je me demande quand les résultats et les notes seront remis/remises.

'I wonder when the result.<sub>mpl</sub> and grade.<sub>fpl</sub> will.be delivered.<sub>f.pl/m.pl</sub>

We conclude that both syntactic (position) and semantic (animacy) factors play a role in French gender attributive agreement. With prenominal Adj, CCA targets the highest N, whereas it targets the lowest N with postnominal A. With human Nouns, gender is not arbitrary but related to social gender, and masculine plural is used to refer to a group of men and women (e.g. *les habitants* 'the inhabitant.<sub>mpl</sub>'). This may explain why CCA (feminine agreement) is more difficult for human Nouns. We also confirm that CCA differs from attraction errors (Bock & Miller 1991, Fayol & Largy 1992). With predicate agreement, on the other hand, the target is more distant (with an intervening copula and/or phrasal boundary), and CCA is disfavored. Our results are also consistent with the distinction between CONCORD (attributive) and INDEX (predicative) agreement features (Wechsler & Zlatic, 2000), and with typological hierarchy proposed by Corbett (1991) that CCA is more acceptable when the target precedes the controller, and with attributive agreement.

Figure 1. Results of Adjective gender agreement Exp.1

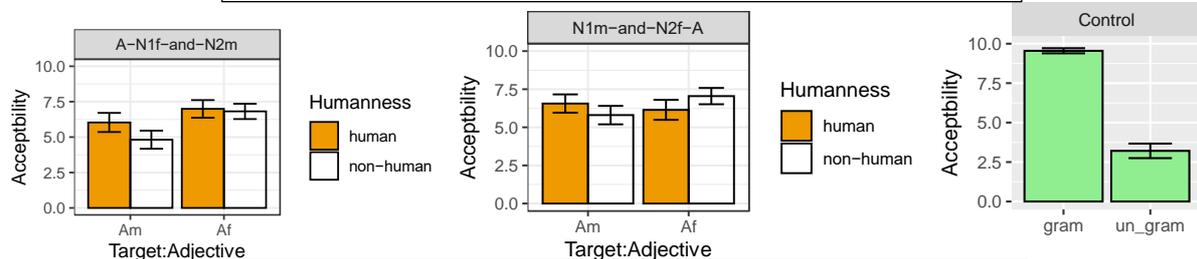
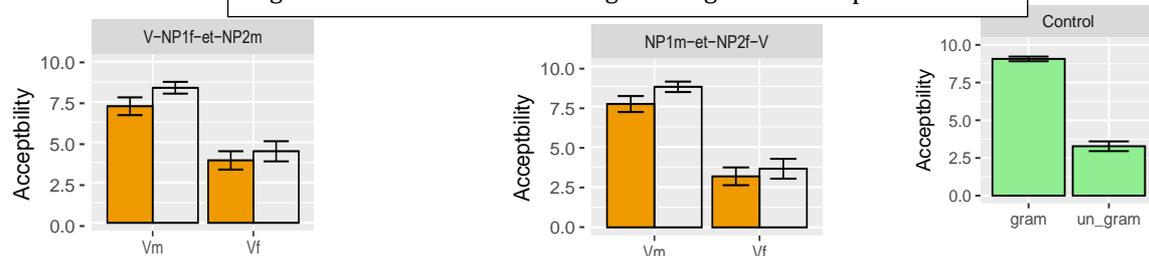


Figure 2. Results of Predicative gender agreement Exp.2



Selected References:

An, A. (2020), Theoretical, Empirical and computational to coordination with agreement structures, PhD Thesis, Université de Paris

Corbett, G. (1991). *Gender*. Cambridge University Press.

Demonte, V., Perez-Jimenez, I. (2012). Closest Conjoint Agreement in Spanish DPs: Syntax and beyond. *Folia linguistica*, 46(1):21–73.

Fayol, M., Largy, P. (1992). Une approche cognitive fonctionnelle de l'orthographe grammaticale : Les erreurs d'accord sujet-verbe chez l'enfant et l'adulte. *Langue française* 95: 80–98.

Wechsler S., L. Zlatic. (2000). A theory of agreement and its application to Serbo-Croatian. *Language*, 799–832.

Willer-Gold, J. et al. (2017). When linearity prevails over hierarchy in syntax. *Proc NAS*