Gender mismatch on adjectival predicates: an experimental perspective on strippinglike constructions in Romanian

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Mismatch effects in elliptical constructions provide an important testing ground for investigating the identity condition claimed to hold between the antecedent and the unpronounced material. In this paper, we focus on gender mismatch in Romanian stripping-like constructions, in particular on inflectional mismatches on adjectival predicates in negative stripping ('X is ADJ, but not Y') and negative pseudostripping ('X is ADJ, but Y no'), where Romanian displays the homophonous negative form *nu* 'no/not'.

In a theoretical study on gender mismatches in Greek predicate ellipsis, Merchant (2014) concludes that, when gender is variable (i.e. on adjectives), it may be ignored under ellipsis, any combination of gender being possible with adjectival predicate ellipsis. In an experimental study on Spanish adjectival predicates, Aparicio et al. (2015) conclude, based on two eye-tracking experiments, that ellipsis resolution is sensitive to morphological feature identity: there is a processing penalty associated with morphological mismatch, mismatched sentences are judged less acceptable than the matched ones, and, in addition, there is a gender asymmetry involved, the ordering Feminine-Masculine being judged less acceptable than the ordering Masculine-Feminine in mismatching environments.

We ran an Acceptability Judgment Task (Likert 7-point scale) on Romanian predicative adjectives, by using a crossed factorial design (2x2x3) with three factors (MATCHING with two levels: *match* vs. *mismatch*; CONSTRUCTION with three levels: *Pseudostripping, Stripping, NoEllipsis*; GENDER with two levels: *masculine* vs. *feminine*, according to the gender of the adjectival antecedent), giving rise to twelve conditions, as illustrated in (1). We had 24 experimental items and 24 filler items (followed by a yes/no comprehension question), one of the conditions in the filler items being an ungrammatical control. We paid attention to the morphological type of predicative adjectives, by using an equal number of adjectives with and without root allomorphy. We had 163 participants (Romanian native speakers; mean age: 29.56; mode: 20), who did the task on the IbexFarm platform and who correctly answered at least 80% of the comprehension questions.

- a. [mismatch, pseudostripping, masc] Dan este politicos, dar sora lui nu.
 'Dan is polite, but his sister no.'
 - [match, pseudostripping, masc]
 Dan este politicos, dar fratele lui nu.
 'Dan is polite, but his brother no.'
 - c. [mismatch, stripping, masc] Dan este politicos, dar nu și sora lui. 'Dan is polite, but not his sister.'
 - d. [match, stripping, masc] Dan este politicos, dar nu și fratele lui. 'Dan is polite, but not his brother.'
 - e. [mismatch, no ellipsis, masc] Dan este politicos, dar sora lui nu este politicoasă. 'Dan is polite, but his sister is not polite.'
 f. [match, no ellipsis, masc]
 - Dan este politicos, dar fratele lui nu este politicos. 'Dan is polite, but his brother is not polite.'

- a'. [mismatch, pseudostripping, fem] Dana este politicoasă, dar fratele ei nu. 'Dana is polite, but her brother no.'
- b'. [match, pseudostripping, fem]
 Dana este politicoasă, dar sora ei nu.
 'Dana is polite, but her sister no.'
- c'. [mismatch, stripping, fem] Dana este politicoasă, dar nu și fratele ei. 'Dana is polite, but not her brother.'
- d'. [match, stripping, fem]
 Dana este politicoasă, dar nu şi sora ei.
 'Dana is polite, but not her sister.'
- e'. [mismatch, no ellipsis, fem] Dana este politicoasă, dar fratele ei nu este politicos. 'Dana is polite, but her brother is not polite.'
 f'. [match, no ellipsis, fem]
- Dana este politicoasă, dar sora ei nu este politicoasă. 'Dana is polite, but her sister is not polite.'

The present study addresses the following research questions: Is there a penalty for gender mismatch across constructions, namely between pseudostripping and stripping? In the mismatched cases, does the gender ordering play a role, as proposed by Aparicio et al. (2015) for Spanish? Concerning the first research question, we expect a penalty for gender mismatch (as observed by Aparicio et al. 2015), at least for the stripping construction, which displays the behaviour of 'surface anaphora', unlike the pseudostripping construction, which behaves rather as 'deep anaphora' (Bîlbîie 2021). As usually assumed (Hankamer & Sag 1976), surface anaphora are more sensitive to the form of their antecedents than deep anaphora. Concerning the second research question, we expect a penalty for the ordering Feminine-before-Masculine, as observed by Aparicio et al. (2015).

The results are given in Figure 1 and Table 1. Descriptively, all our experimental conditions were rated above 6, unlike ungrammatical controls (2.54). The participants' acceptability ratings were entered into a mixed-effect linear regression analysis using the lme4 package (Bates et al. 2015) in R, with Matching and Construction as fixed predictors, and Participant and Item as random effects. The analysis does not reveal any effect of Matching, but it reveals a main effect (p<.05) of Construction type (namely, with the non-elliptical version, which is less preferred than stripping and pseudostripping), and a significant interaction (p<.05) between Matching and Construction in the case of the non-elliptical version (as participants rated the matched conditions significantly lower than the mismatched ones when there was no ellipsis). We ran additional linear

regression analyses on the Mismatch conditions only, in order to observe the interaction between Gender Ordering (Masculine-before-Feminine vs. Feminine-before-Masculine) and Construction. The descriptive results are given in Figure 2 and Table 2. Once again, the analysis does not reveal any effect of Gender Ordering, any effect of Construction, and any interaction between these two factors. Interestingly, we did find a significant interaction (p<.05) between Allomorphy and Construction in the case of mismatched non-elliptical cases, as participants rated the full sentences with allomorphic adjectives higher than those with non-allomorphic ones. Overall, our results do not show any penalty for gender mismatch in pseudostripping and stripping, any asymmetry effect related to the gender ordering, and any asymmetry effect with respect to the morphological shape of predicative adjectives. However, in the non-elliptical construction, our results show a penalty for gender match (i.e. repetition penalty) and a penalty for non-allomorphic adjectives.

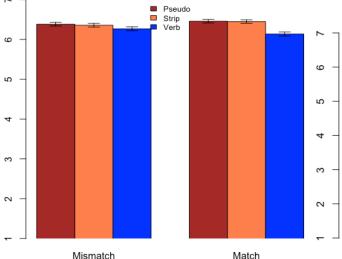
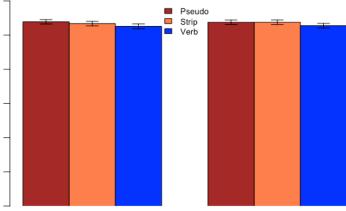


Figure 1. Mean acceptability judgments for the three constructions wrt Matching factor

	pseudo	strip	verb
match	6.45	6.44	6.13
mismatch	6.38	6.35	6.26

Table 1. Mean acceptability judgments for the

 Matching factor across the three constructions



MascBeforeFem FemBeforeMasc Figure 2. Mean acceptability judgments for the Mismatch conditions wrt Gender Ordering

	pseudo	strip	verb
masc	6.38	6.33	6.25
fem	6.37	6.37	6.27

Table 2. Mean acceptability judgments for

 Mismatch conditions wrt Gender Ordering

We conclude that gender mismatches are perfectly acceptable with predicative adjectives in Romanian stripping-like constructions. This is expected under a what-you-see-is-what-you-get perspective, such as construction-based approaches to stripping and related constructions. On the other hand, the penalty for gender match and non-allomorphic adjectives in the absence of ellipsis supports the 'avoid redundancy' principle, observed for other elliptical constructions (Kim et al. 2011) and anaphoric structures in general (Williams 1997)

References: Aparicio, H., K. Franich & M. Xiang 2015. Morphological feature mismatches under ellipsis: an eye-tracking Study. *Proceedings NELS* 45. **Bates**, D., M. **Maechler**, B. **Bolker** & S. **Walker**. 2015. Fitting linear mixed-effects models using lme4. *Journal of Statistical Software* 67(1): 1-48. **Bîlbîie**, G. 2022. Same form, but not the same construction: on the negative form *nu* 'no/not' in Romanian. *The* 31st *Joint Workshop on Linguistics and Language Processing*, Kyung Hee U. **Hankamer**, J. & I. A. **Sag**. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7(3): 391-428. **Kim**, C.S., G.M. **Kobele**, J.T. **Runner** & J.T. **Hale** 2011. The acceptability cline in VP ellipsis. *Syntax* 14: 318-354. **Merchant**, J. 2014. Gender mismatches under nominal ellipsis. *Lingua* 151. **Williams**, E.S. 1997. Blocking and anaphora. *Linguistic Inquiry* 28: 577-628.