Interpretation of Masculine Generics in European Portuguese

A controversial topic in the literature regarding the intersection of grammatical phenomena and human gender is the analysis of Masculine Generic (MG) nouns. In gender-marked languages, MG nouns are linguistic items in which grammatical gender is morpho-syntactically expressed, bearing [+Human], [-Feminine] and [+Plural] semantic features, despite being semantically ambiguous: they can refer to both groups of men (in their specific interpretation), and mixed-gender groups (in their generic interpretation). Several studies (Esaulova et al., 2014; Gygax et al., 2012; Horvath et al., 2016; Stahlberg et al., 2007) have proposed that within Indo-European grammatical gender languages, MG nouns are preferentially interpreted as specific, not as generic. However, to the best of our knowledge, no previous research has investigated whether this is the case in European Portuguese (EP). The present work directly addresses this shortcoming by using two experimental paradigms.

In Experiment 1, we tested 93 gender-marked plural nouns (*enfermeiras*[Fem]/*os*[Masc] - nurses[Fem]/[Masc]) to investigate their degree of stereotypicality (Gabriel et al., 2008 and Miserky et al., 2014). 342 EP native speakers rated each MG noun considering the percentage of women or men. We used a 2 x 2 between-subjects design with the grammatical information (MG nouns only - Fig. 1 -, and grammatically feminine and masculine forms of the nouns, each form in each side of the scale - Fig. 2) and the scale's direction (grammatically feminine form of the nouns + respective gender icon on the left side of the scale with the corresponding grammatically masculine version of the nouns + respective gender icon on the right side of the scale vs. the other way around - Fig. 2 -; in the MG condition, only the gender icons were presented - Fig. 1) as independent variables. Our results indicate that there is an overall tendency to judge the nouns as stereotypically male: 60% of the evaluated nouns were judged to represent a population composed of 55% or more men. However, this tendency is less pronounced when both feminine and masculine forms were presented (*Est* = -2.086, *t* = -3.769, *p*<0.001), and even less so when the feminine form (and the corresponding gender icon) was presented on the left side of the scale (*Est* = 2.752, *t* = 5.117, *p*<0.001).

In Experiment 2, we selected nouns from Exp. 1 that were rated as stereotypically male (e.g. *canalizadores*, plumbers), stereotypically female (e.g. *costureiros*, dressmakers) and less stereotypical nouns (e.g. *vizinhos*, neighbours). We tested the interpretation of 24 EP nouns, in their MG form, and the influence of stereotypicality on such interpretations. In a sentence evaluation paradigm adapted from Gygax et al. (2008), EP native speakers (n=50) judged whether the second sentence (B) was a plausible continuation for the first (A), as in (1). While the subject of the first sentence was always a MG noun, the subject of the second sentence was either a conceptually masculine noun (*homens*, men) or a conceptually feminine noun (*mulheres*, women). The stereotype of the evaluated noun (masculine, feminine or neuter, i.e., less stereotypical) and the conceptual gender of the subject in the second sentence (men vs. women) were analyzed as independent variables in a 2 x 2 within-subjects design. The type of the judgement (positive vs. negative) and the reaction times were the dependent variables. Our results indicate that participants interpreted sentence B as a plausible continuation of sentence A when the subject of sentence B was masculine (Fig. 3, Est=-0.994, z=-4.496, p<0.001). Reaction times were also significantly faster in this condition (Fig. 4, Est=0.081, t=5.883, p<0.001).

Overall, our results indicate that: (i) the preferential interpretation of EP MG nouns is specific, and not generic, (ii) EP MG interpretation is primarily driven by grammatical clues and not by pragmatic information (gender stereotypes), and (iii) it is possible to reduce women's conceptual invisibility by explicitly referring them within nominal morphology.

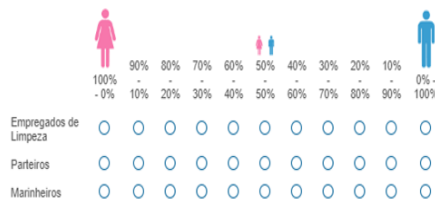Figure 1 - Female-left version with Masculine Generics (*Exp. I*)

Figure 2 - Female-right version with masculine and feminine nouns *(Exp. I)*

(1) A: <u>*Os*_{Masc} *canalizadores*_{Masc} / *costureiros*_{Masc} / *vizinhos*_{Masc}</u> *saíram da sala*.

'The_{Masc} plumbers_{Masc} / dressmakers_{Masc} / <u>neighbours_{Masc}</u> left the room.'

B: *Era evidente que* <u>*alguns dos homens*</u> / <u>*algumas das mulheres*</u> *estavam zangados/as*.

'It was evident that some_{Masc} of the_{Masc} men_{Masc} / some_{Fem} of the_{Fem} women_{Fem} were angry_{Masc/Fem}.'
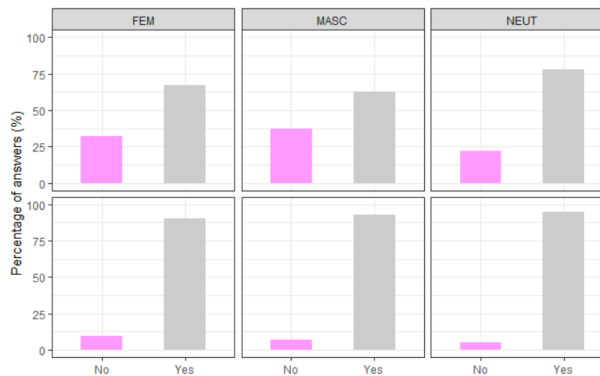

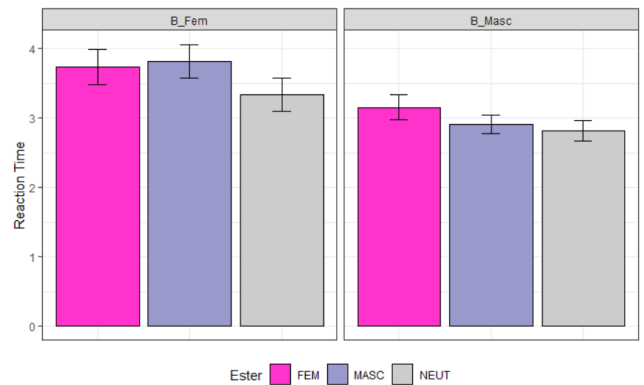*Figure 3 – Proportion of positive judgements in Experiment 2*

Figure 4 – Positive judgement times in Experiment 2

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