

Interpreting and producing grammatical gender on novel nouns in L1 and L2 Spanish

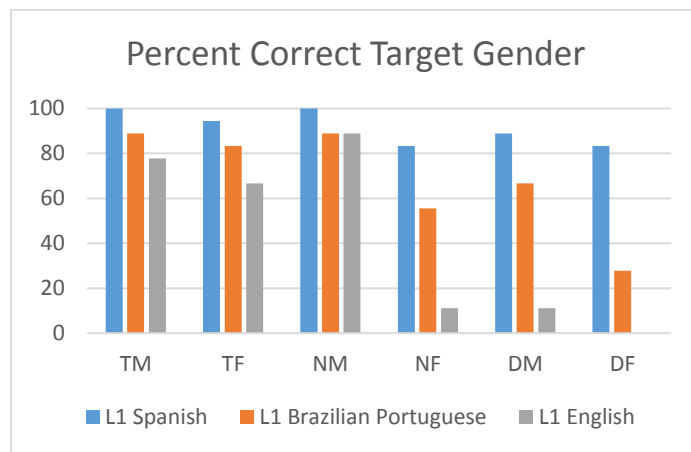
Grammatical gender is an inherent lexical property of nouns that categorizes them into two or more classes (Corbett 1991). This linguistic phenomenon is acquired early and easily in first language (L1) acquisition (Hernandez-Pina, 1984); in Second Language (L2) acquisition, on the other hand, research has indicated that while L2 speakers are able to acquire the gender feature, they may continue to make non-native-like errors even at advanced stages of proficiency (Prévost and White 2000; Bruhn de Garavito and White, 2002; White et al., 2004; Montrul et al., 2008). Errors among L2 learners that have gender in their L1 (e.g. French speakers learning Spanish) have generally been attributed to confusion between the two languages (White et al., 2004) or to a production-specific difficulty (Bruhn de Garavito and White, 2002). It remains unclear why this easily acquired L1 phenomenon is so much more problematic in L2 acquisition. Previous research has focused on learners' abilities to apply syntactic constraints; however there is a gap in the research concerning how L1 and L2 speakers assign gender to new words in a natural context.

The current research explores how native and non-native speakers assign and produce the grammatical gender feature for nonce (i.e. invented) nouns in Spanish within a unification-based framework, Head-driven Phrase Structure Grammar – HPSG (Pollard & Sag, 1994). This framework allows languages to be organized and compared in type hierarchies based on their productive linguistic features. Spanish and Portuguese share a similar type hierarchy in which grammatical gender is an obligatory agreement feature of all nouns. Conversely, English has a type hierarchy for which grammatical gender is never an agreement feature; however it does exist as a feature of semantic agreement. Based on this information, the prediction in this study is that L1 Spanish and L1 Brazilian Portuguese (BP) / L2 Spanish speakers assign grammatical gender to novel nouns using feature information from determiners/modifiers; whereas L1 English / L2 Spanish speakers assign gender based on morphological shape of the word.

This research investigates three participant groups: L1 Spanish speakers (n=12) from Mexico, Uruguay and Perú; L1 Brazilian Portuguese (BP) / L2 Spanish speakers (n=12) enrolled in an intermediate level Spanish course at the Federal University of Juiz de Fora, Brazil; and L1 English / L2 Spanish (n=12) taking intermediate (300-level) courses at the University of Massachusetts Amherst. Six versions of an interpretation & production task were created that manipulate novel noun morphology and gender in a 3x2 Latin Square design (see Table 1). Participants listened to a total of 18 short situations presented with pictures on a computer screen. In each situation a novel item is presented twice, differing along a single characteristic (denoted by an adjective). After a 3-2-1 countdown, participants view the scene one more time (without the objects) and are asked what was in one of the locations. They must respond with the correct object, necessarily providing a determiner and adjective in their response.

Results for each group were analyzed and, as expected, native Spanish speakers relied mostly on the syntactic cues provided in the determiner and modifier; though we see that native speakers are not completely immune to morphological mismatches. Contrary to this study's prediction, L1 BP / L2 Spanish speakers use the morphological shape as well as syntactic cues to assign grammatical gender to the novel noun. Finally, L1 English / L2 Spanish speakers rely almost

exclusively on the morphological shape of the new word to attribute grammatical gender. Over 60% of L1 English speaker's errors were the result of attributing the wrong gender to the noun, whereas the remaining errors were the result of gender inconsistencies between the determiner and adjective. The BP speakers on the other hand had no errors of gender inconsistencies within the NP. These results indicate that L2 speakers rely on morphological shape of new vocabulary items, even when their L1 has the same syntactic properties as their L2.



Morphology	Noun Gender	
	Masculine	Feminine
Transparent	-o (TM)	-a (TF)
Neutral	-e (NM)	-e (NF)
Deceptive	-a (DM)	-o (DF)

Table 1. Experimental conditions

Figure 1. Results

REFERENCES

Bruhn de Garavito, J., & White, L. (2002). The second language acquisition of Spanish DPs: The status of Grammatical features. In A. T. Pérez-Leroux & J. M. Liceras (eds.), *The acquisition of Spanish morphosyntax: The L1/L2 connection*, pp. 153-178. Dordrecht: Kluwer.

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

Hernández-Pina, F. (1984). *Teorías psicosociolingüísticas y su aplicación a la adquisición del español como lengua materna*. Madrid: Siglo XXI.

Montrul, S., Foote, R., & Perpiñán, S. (2008). Gender Agreement in Adult Second Language Learners and Spanish Heritage Speakers: The effects of Age and Context in Acquisition. *Language Learning* 58,3, 503-553.

Pollard, C. and Sag, I. (1994). *Head-Driven Phrase Structure Grammar*. CSLI, Stanford.

Prévost, P. and White, L. 2000. Missing Surface inflection or impairment in second language acquisition? Evidence from tense and agreement. *Second Language Agreement*,16, 103-133.

White, L., Valenzuela, E., Kozłowska-MacGregor, M. And Leung, I. (2004). Gender and number agreement in nonnative Spanish. *Applied Psycholinguistics*, 25: 105-133.