Animacy features and lexical knowledge in Spanish case marking by Portuguese speakers

Despite the typological proximity existing between Brazilian Portuguese (BP) and Spanish, the use of the Differential Object Marking (DOM) and clitics contrasts significantly. For example, these two languages differ in the semantic properties licensing object clitic use, and Spanish is considered a DOM language, unlike BP. DOM refers to the overt morphological marking of direct objects under certain conditions (Aissen, 2003), namely animacy and definiteness in Spanish (Leonetti, 2004). In BP, DOM can differentially mark direct objects in some rare cases such as before *Deus* 'God' and other religious nouns (Perini, 2002), in verbs that express feelings (Ramos 1989), and before pronouns "in the written language, before object pronouns when modified or when emphasized" (Perini, 2002, p. 444). With regard to the distribution of object clitics, in Spanish, third-person object clitics (e.g., *lo, la, los, las*) are constrained by the definiteness features of the object they refer to: definite referents require overt clitics while indefinite referents present null clitics (Campos, 1986; Sánchez, 1999). In BP, the main feature constraining the distribution of object clitics is animacy (Schwenter & Silva, 2002).

In this study, we tested Lardiere's (2009) Feature Reassembly Hypothesis by examining the potential reassembly of animacy features in these two phenomena: While *a*-marking in Spanish is ruled by animacy, this phenomenon is scarce in BP, and the distribution of overt and null clitics is sensitive to animacy in BP, but only to definiteness in Spanish. We investigated the patterns BP-speaking L2 learners of Spanish show regarding their acquisition of DOM and clitic distribution in Spanish, and whether those L2 acquisition patterns are modulated by their productive lexical knowledge in their L2 Spanish. 73 BP-speaking L2 learners of Spanish completed a language background questionnaire, a 58-item productive lexical test in Spanish and BP (*Prueba Léxica de Español y Portugués, PLEP*), and acceptability judgment tasks (AJT) in both Spanish and BP. We designed and implemented the productive lexical test PLEP, which considers lexical frequency when measuring lexical knowledge. The AJTs included 32 experimental items per structure (64 distractors, 128 in total) distributed in four conditions ($k = 8$) based on the combination of animacy features and use or non-use of *a*-marking and/or of overt clitic (see Table 1). We analyzed the data sets with four ordinal regressions including *response* (1-5) as the dependent variable, and grammaticality, animacy, and lexical knowledge as independent variables.

Results for Spanish show that the participants' DOM is sensitive to grammaticality ($p < 0.01$) and that deeper productive lexical knowledge resulted in lower ratings overall ($p < 0.01$) (see Fig. 1). Regarding clitic distribution, speakers were also sensitive to grammaticality ($p < 0.01$), deeper lexical knowledge led to higher ratings overall ($p < 0.01$), inanimate ungrammatical items were rated lower than animate ungrammatical items ($p = 0.04$), and ungrammatical items were rated lower ($p < 0.01$) (see Fig. 1). In BP, their native and dominant language, the participants were sensitive to the presence of *a*-marking ($p < 0.01$), particularly with items testing inanimate referents ($p < 0.01$). For clitic distribution, the participants showed sensitivity to the contrast between overt and null clitics ($p < 0.01$), gave higher ratings to items testing inanimate referents overall ($p < 0.01$), and within the items testing overt clitics, they rated animate referents higher than inanimate ones ($p < 0.01$). These results are consistent with the Feature Reassembly Hypothesis, as they show that these learners are in the process of reassembling animacy features from their L1 into their L2: *a*-marking and clitic distribution in the L2 are sensitive to grammaticality, and such sensitivity increases with deeper lexical knowledge. However, their *a*-marking is not ruled by animacy while their clitic distribution is. In their L1, as expected, *a*-marking is rejected, particularly with inanimate referents, and their clitic distribution is ruled by

animacy. This reassembly process in the L2 is more advanced with increased lexical knowledge, as shown by the interactions between lexical knowledge and grammaticality.

Table 1. Spanish AJT test item samples by condition.

Structure	Animacy	Gram.	Test item samples
DOM	Animate	Gram.	Manuela está orgullosa porque... Su hijo escuchó **a** la profesora.
		Ungram.	Ana está triste porque... *Su hijo empujó **Ø** la señora.
	Inanimate	Gram.	José está preocupado porque... Su hijo escuchó **Ø** la canción vulgar.
		Ungram.	Beatriz está triste porque… *Su hijo empujó **a** la mesa.
Clitic distribution	Animate	Gram.	Mario perdonó a Luisa por su error y... **La** abrazó con afecto.
		Ungram.	José vistió a la niña Mariana y... ***Ø** Colocó en su cama.
	Inanimate	Gram.	Antonio preparó su comida favorita y... **La** dejó en el refrigerador.
		Ungram.	José compró su película favorita y… ***Ø** Vio tres veces en un día.

Figure 1. Acceptability of Spanish DOM (left) and clitic distribution (right) across grammaticality, condition (presence vs absence of DOM or clitic), and PLEP score.
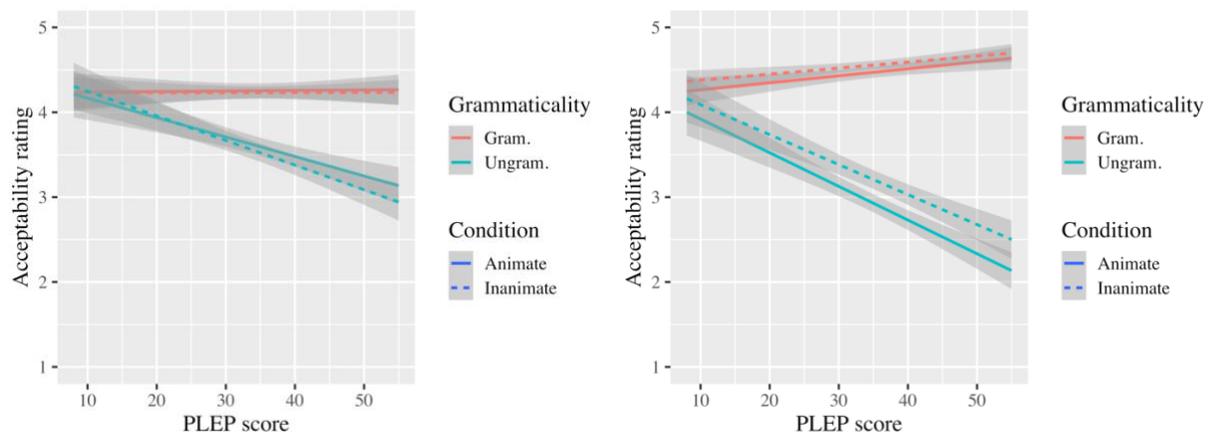
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