

REVERSE TRANSFER IN CLITIC COLLOCATION A STUDY ON SPANISH AND BRAZILIAN PORTUGUESE

TRANSFERÊNCIA REVERSA E COLOCAÇÃO CLÍTICA UM ESTUDO COM BILÍNGUES PORTUGUÊS BRASILEIRO E ESPANHOL

Thamyres Ribeiro da Silva Ramos*
thamyres_rsr@hotmail.com/ thamyres_rsr@ufrj.com.br

Marina Rosa Ana Augusto**
mraaugusto@gmail.com/ marinaaug@uerj.br

This study focuses on reverse transfer, that is, the influence of L2 on L1, in a dominance situation of L1. It investigates clitic collocation in verbal complexes in Brazilian Portuguese (BP) and Spanish. Spanish privileges proclisis to the auxiliary verb (pre-verbal position/clitic climbing) or enclisis to the main verb (post-verbal position). BP, in turn, lost clitic climbing in the XIX century. Although schooling tries to recover it, natural speech privileges proclisis to the main verb (medial position). Thus, in principle, it can be assumed that highly educated BP speakers may accept clitic climbing, regardless of any fluency in Spanish. On the other hand, full acceptance of clitic climbing may constitute a case of reverse transfer in the context of bilingual BP/high-proficiency Spanish speakers. In order to observe this situation, a self-paced reading experimental task with a Likert scale grammatical judgment was applied, manipulating the position of the clitic in Portuguese sentences with highly educated BP monolinguals and BP/high-proficiency Spanish bilinguals. The results show that both groups accept clitic climbing, but bilinguals accept it even more, and are faster in reading Portuguese sentences with clitic climbing, suggesting a possible Spanish facilitation in the Portuguese sentence processing.

Keywords: Clitic placement. Reverse transfer. Portuguese. Spanish.

Este artigo trata de transferência reversa, isto é, a influência da L2 na L1, em situação de dominância da L1. Investiga-se a colocação pronominal clítica em complexos verbais no português brasileiro (PB) e no espanhol. O espanhol privilegia a próclise ao verbo auxiliar (posição pré-verbal/subida do clítico) ou a ênclise ao verbo principal (posição pós-verbal). O PB, por sua vez, perdeu a subida do clítico no século XIX. Embora a escola tente recuperar seu uso, a fala natural privilegia a próclise ao verbo principal (posição medial). Assim, em princípio, pode-se admitir que falantes escolarizados do PB aceitem a ordem com a subida do clítico. Por outro lado, uma aceitação plena da subida do clítico pode constituir um caso de transferência reversa, no contexto de falantes bilíngues de PB/espanhol. A fim de observar esse quadro, aplicou-se uma tarefa de leitura automonitorada com escala Likert para julgamento de gramaticalidade,

* Departamento de Letras Neolatinas, Faculdade de Letras, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brasil. ORCID: 0000-0001-6338-7378.

** Departamento de Estudos da Linguagem, Instituto de Letras, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brasil. ORCID: 0000-0002-9022-394X.

manipulando a posição do clítico, em sentenças em português, a monolíngues de PB com alta escolaridade e bilíngues PB/espanhol. Os resultados demonstram que ambos grupos aceitam a subida do clítico, mas os bilíngues apresentam maior aceitação e são mais rápidos na leitura das sentenças em português com subida do clítico, sugerindo uma possível facilitação do espanhol no processamento de sentenças em português.

Palavras-chave: Colocação clítica. Transferência reversa. Português. Espanhol.

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1. Introduction

This study addresses the issue of reverse transfer, that is, L2 influences on L1, with L1 as the dominant language, focusing on clitic collocation in verbal complexes, contrasting Brazilian Portuguese (BP) and Spanish. Recent studies have considered that reverse transfer may affect not only individuals who have been immersed in the context of L2, but also those who show an intermediate or high proficiency on their L2, but have their L1 as the dominant language for daily usage (Cook *et al.* 2003; Pavlenko & Jarvis 2003; Souza, Oliveira, Passos & Almeida 2014).

Although several phenomena may be permeable to reverse transfer, in this study we focus on a particularly interesting phenomenon, since BP has already shared with Spanish one of the characteristics of clitic collocation – clitic climbing. Clitic climbing was lost in the nineteenth century. Thus, in spontaneous speech, clitic climbing never appears nowadays. However, schooling tries to recover its use and it is particularly encouraged in written production. Thus, highly educated BP speakers may demonstrate some acceptance of clitic climbing. By its turn, higher acceptance of clitic climbing by BP/high-proficiency Spanish bilinguals could also be taken as a case of reverse transfer.

This context is thus particularly interesting for the discussion on reverse transfer. We take into account notions such as internalized grammar and peripheral grammar (marked periphery) in the sense of Chomsky (1981) and Kato (2005) in order to discuss the extent to which reverse transfer would be actually occurring. To what extent can the acceptance of clitic climbing be due to reverse transfer from Spanish to BP or be just a case of identifying some rules from L2 as possible peripheral rules of L1, that is, a simple case of reinforcement of peripheral rules? For this discussion, we consider the results of a Likert scale grammatically judgment, embedded in a self-monitored reading task. The position of the clitic was manipulated in Portuguese sentences, presented to highly educated BP monolinguals and BP/high proficiency Spanish bilinguals.

The paper is organized as follows: The next section presents BP speakers as diglossic in the sense of presenting marked periphery rules, which are only acquired by exposition to literacy. Then, Section 3 contrasts clitic collocation in both Spanish and BP. Section 4 presents the experimental task and the main results obtained. The last section brings our final remarks.

2. Internalized grammar, marked periphery, and processing demands

Terms like interference or influence have given way to the notion of transfer, especially in second language acquisition and refers to previously learned patterns (the knowledge of the native language), which emerge in a new learning situation (the acquisition of a foreign language). The idea, however, is that this transfer may have a facilitation (positive transfer) or an inhibition effect (negative transfer) in the learner's progress. This notion was also applied in the opposite direction (transfer from L2 to L1) and was termed reverse transfer. Recent studies have focused on reverse transfer not only for individuals who have been immersed in the context of L2, but also for those who show an intermediate or high proficiency on their L2 but have their L1 as the dominant language for daily usage. Thus, cross-linguistic influence is taken as often bidirectional or even multidirectional (Cook *et al.* 2003; Jarvis 2003; Pavlenko 2000; Souza *et al.* 2014). Jarvis (2003) argues that L2 influences L1, expanding its repertoire. The rules from the grammar of L1 are still plainly established, but rules from L2 are available and may be occasionally used. Cook (1991) adopts the concept of multi-competence, arguing for the possibility of "two co-existing grammars in the same mind", a major issue for UG-oriented research. The main question is what would most likely be transferred from one system to another and what mechanisms would allow it. This study does not intend to delve into these topics, but aims to present some relevant notions, which are of interest for the discussion on reverse transfer, particularly in the case discussed here.

The idea of multi-competence or multiple grammars has also been explored with regards to intra-linguistic variation. BP speakers constitute a clear case. There is a distinction between natural oral speech grammar and formal written record grammar. Thus, BP speakers are considered diglossic, insofar as a natural grammar is acquired during early childhood, but schooling/exposition to literacy will present conflicting rules, which ultimately get to be mastered. Kato (2005), following Chomsky (1981), adopts the concept of a marked periphery, which may be added to a core grammar. The natural growth of a grammar during the earliest years of language acquisition constitutes a core grammar. A marked periphery may be added to this core grammar and may be expanded through the next years of life of any speaker, through exposition to formal varieties of language, loans, schooling, etc. Since the attempt to grasp such rules will be postponed to older age, Kato (2005) argues that the process of learning a written Portuguese grammar by a Brazilian individual would be similar to a process of learning a second language. This process would be subjected to greater individual difference performance, core grammar interference, inconsistent use, and hypercorrections. By its turn, very proficient speakers may end up being very accurate and natural in using the rules of the peripheral grammar. Thus, the speed/ease of processing sentences with these marked rules may be an indicator of how natural certain peripheral rules may have become for an individual, that is, how proficient he/she in the written variety.

Clitic collocation constitutes a phenomenon showing marked periphery rules in BP. Highly educated individuals are diglossic. Low-educated speakers make use of the proclitic position in sentences with simple verbs and the medial position in verbal

complexes, whereas highly educated speakers are comfortable with enclisis with simple verbs and even clitic climbing in verbal complexes. The next section contrasts BP and Spanish in relation to clitic collocation in verbal complexes, our focus in this paper.

3. Clitic collocation in Spanish and Brazilian Portuguese

Spanish and BP behave differently in terms of clitic collocation in verbal complexes, although some similarities may be noticed (González 1994). Spanish presents a stable system with proclisis to the auxiliary verb (pre-position/clitic climbing), as in 1a, or enclisis to the main verb (post-position), as in 1b.

- (1) a. Lo estoy haciendo.
 it_{ACCUS} be_{1PS} doing
 ‘I am doing it.’
- b. Estoy haciéndolo.
 be_{1PS} doing-it_{ACCUS}
 ‘I am doing it.’

BP lost clitic climbing in the XIX century (Pagotto 2013). BP oral production, that is, the natural internalized grammar, makes use of proclisis to the main verb, that is, a medial position, in 2a, or enclisis to the main verb, in 2b, (especially with third person clitics). However, schooling tries to recover clitic climbing (Kato 2005) and BP normative grammar prescribes it, that is, proclisis (pre-position/clitic climbing) to the auxiliary verb, in 2c, or, alternatively, enclisis to the auxiliary verb, in 2d (Azeredo 2010; Bechara 2009):

- (2) a. A atriz vai te convidar para o seu aniversário.
 the actress go_{3PS} you_{ACCUS} invite to the her birthday
 ‘The actress will invite you to her birthday.’
- b. A atriz vai convidar-te para o seu aniversário.
 the actress go_{3PS} invite-you_{ACCUS} to the her birthday
 ‘The actress will invite you to her birthday.’
- c. A atriz te vai convidar para o seu aniversário.
 the actress you_{ACCUS} go_{3PS} invite to the her birthday
 ‘The actress will invite you to her birthday.’
- d. A atriz vai-te convidar para o seu aniversário.
 the actress go_{3PS}-you_{ACCUS} invite to the her birthday
 ‘The actress will invite you to her birthday.’

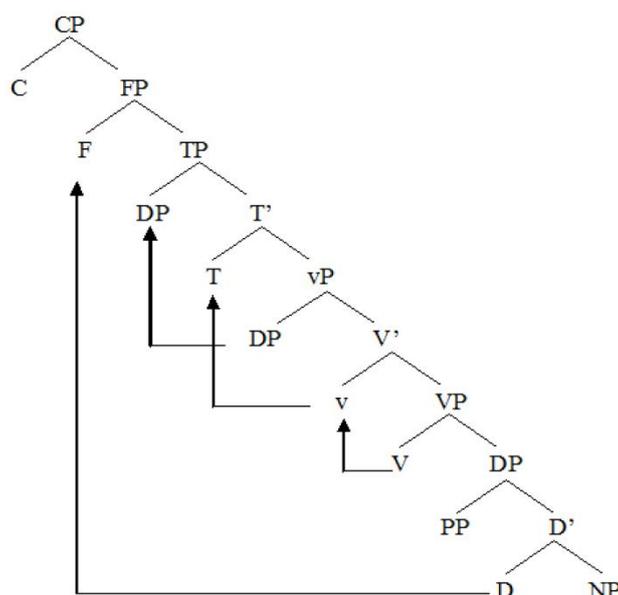
Thus, BP is a case of diglossia - two distinct varieties of a language coexist within the same speech community. Actually, a highly educated BP speaker fluctuates between

different grammars for oral and written varieties (Kato 2005). Thus, the most natural collocation in BP, the medial position, is an ungrammatical possibility in Spanish, as shown in 3.

- (3) *La actriz va a te invitar a su cumple.
 the actress go_{3PS} to you_{ACCUS} invite to her birthday
 'The actress will invite you to her birthday.'

Clitics are considered D (determiner) elements, which move from their base argumental position towards a verbal host (Raposo 1998). This may be a long movement in verbal complexes (clitic climbing). Clitic climbing is seen as a natural phenomenon in Spanish grammar, but it is only part of an archaic grammar for BP. According to Uriagereka (1995), an FP position above TP hosts the clitic in proclitic position to the auxiliary verb, as in 1 and 2a.

- (4)



In BP, clitic long movement was lost, thus clitics do not reach the F position anymore. They are cliticized to the main verb in proclitic (medial) or enclitic (post) positions. For written grammar, BP speakers have to perceive that proclisis or enclisis may occur to the auxiliary verb. This does not mean that an F position is actually represented. This may constitute a stylistic rule, making part of their marked peripheral grammar, as discussed earlier.

Actually, Rodríguez-Mondoñedo, Snyder e Sugisaki (2006) argue that clitic climbing is an early parameter setting (Wexler 1996, 1998) in Spanish, and as suggested by Kayne (1989), it would be related to the possibility of null subjects in the language. As BP is no longer considered a prototypical null subject language (Holmberg, Nayudu & Sheehan 2009; Kato & Duarte 2014), it is not expected that the vernacular language

will present clitic climbing *per se*. Therefore, proclitic position to the auxiliary verb is not part of a natural grammar in BP. Nevertheless, it may be acquired through literacy/schooling, making part of a highly educated speaker's marked periphery to his/her grammar (Chomsky 1981; Kato 2005), that is, related to formal styles. Could thus clitic collocation be a particularly permeable phenomenon to reverse transfer, considering Spanish and BP? Could Spanish particularly influence the evaluation and use of variants regarding the position of the clitic in BP, intensifying the acceptance of proclisis to the auxiliary verb, that is, clitic climbing?

In order to test it, a self-paced reading task was applied which will be reported in the next section.

4. Self-paced reading task with a Likert scale for judgement

The self-paced reading task presented forty-eight sentences in Portuguese, composed of test sentences (twelve sentences), and distractors (thirty-six sentences). These were subdivided in two groups – grammatical (eighteen) and ungrammatical (eighteen) sentences. Test sentences made use of 4 distinct clitics (*me* (me), *te* (you), *se* (himself/herself/itself), *nos* (us))¹, which could appear in proclitic position, medial position or enclitic position. The sentences were segmented: the first segment presented the subject of the sentence; the second segment was the critical one, presenting the clitic and the verbal complex; the last segment presented the complement to the verb or adjuncts. Segments 2 and 3 were controlled for number of syllables. Segment 2 was the critical one and segment 3 could give us information about spill-over effects.²

Three distinct lists were created, presenting 3 trials for each of the 4 clitics in the three distinct positions (pre/medial/post). Sentences in each list were randomized by the Paradigm 2.5 software. This computer program also registers the reading times for each segment and the kind of answer provided by the participant. He/she was supposed to evaluate the acceptability of the sentence in a Likert scale, varying from -2 (least acceptable) to +2 (completely acceptable). The task was administered to two groups: monolingual BP speakers (basic knowledge of English was sometimes reported) and bilingual BP/high-proficiency Spanish speakers.

¹ The reflexive clitic pronoun *se* (himself-herself-themselves) was used instead of the objective third person clitics *o(s)/lo(s)-a(s)/la(s)* (him-her-them) (i), given the usual substitution, in informal BP, by null objects (ii) and lexical pronouns (iii) (Duarte 1989):

- (i) *Pedro já está no aeroporto e eu vou buscá-lo.*
P. already be_{3RDSING} in-the airport and I will pick up-him.
- (ii) *Pedro já está no aeroporto e eu vou buscar.*
P. already be_{3RDSING} in-the airport and I will pick up
- (iii) *Pedro já está no aeroporto e eu vou buscar ele.*
P. already be_{3RDSING} in-the airport and I will pick up-he.
'Pedro is already at the airport and I will pick him up.'

² Spillover effects refer to a secondary effect that may follow from a primary effect, although far removed in time or place from the event that caused the primary effect. In psycholinguistics, for reading times, it is seen as an effect that may be measured after the segment (in the next segment or at the end of the sentence) containing the conditions under investigation.

Our working hypothesis is that BP/Spanish bilinguals will differ from BP monolinguals in relation to their judgements of clitic collocation, if reverse transfer acts upon these bilinguals. It would thus be expected that both monolinguals and bilinguals accept the medial position of the clitic (the preferred order in natural BP), but behave differently in relation to the proclitic position, if Spanish influences the judgement of Portuguese sentences for the bilingual speakers. Nevertheless, it is important to highlight that this proclitic position is also reinforced by schooling in Brazil. Insofar as monolinguals under investigation are highly educated individuals, a high acceptance of this order by this group could also be expected. Thus, in order to posit that reverse transfer is acting, a clear difference between the groups should be found.

4.1. Method

4.1.1. Participants

In this research, forty-five participants took part in the experiment: thirty BP monolinguals (ages from nineteen to thirty-two) and fifteen BP/high-proficiency Spanish bilinguals. A Spanish proficiency test for the bilinguals was planned. However, as the participants were recruited from a post-graduating course for Spanish teachers, it was considered unnecessary.

4.1.2. Material

A laptop HP was used, equipped with the software Paradigm 2.5, which is responsible for presenting the sentences for self-paced reading. The software displays an Excel archive with reading times and answers for the Likert scale per participant.

4.1.3. Procedure

Each participant was invited to take part in the experiment in a quiet room, where he/she sat in front of the computer and received instructions from the investigator. The test began with written instructions also displayed on the computer screen and a pre-test (with 5 sentences), in order to make sure that the participant grasped the procedure. He/she was asked to read the segments of the sentences, using the Space button to follow from one segment to the next. At the end of the sentence, a scale from +2 to -2 would appear on the screen. He/she should judge how acceptable the sentence was. At times, a question about the last sentence read could also appear. He/she should answer using the buttons yes or no. Reading times for the segments were recorded, the scale point chosen for the evaluation of the sentence was registered as well the response time for the evaluation of the sentence (picking a value in the Likert scale provided). Figure 1 and Figure 2 exemplify each step in the task.

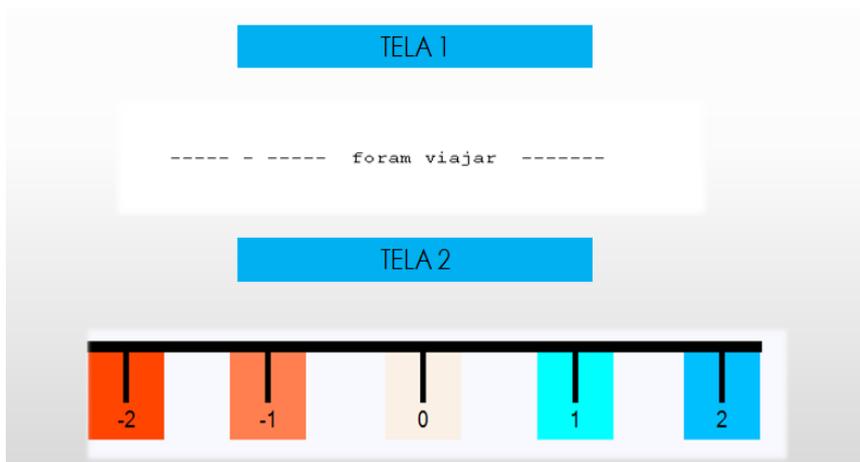


Figure 1. Experiment – self-paced reading and Likert scale.

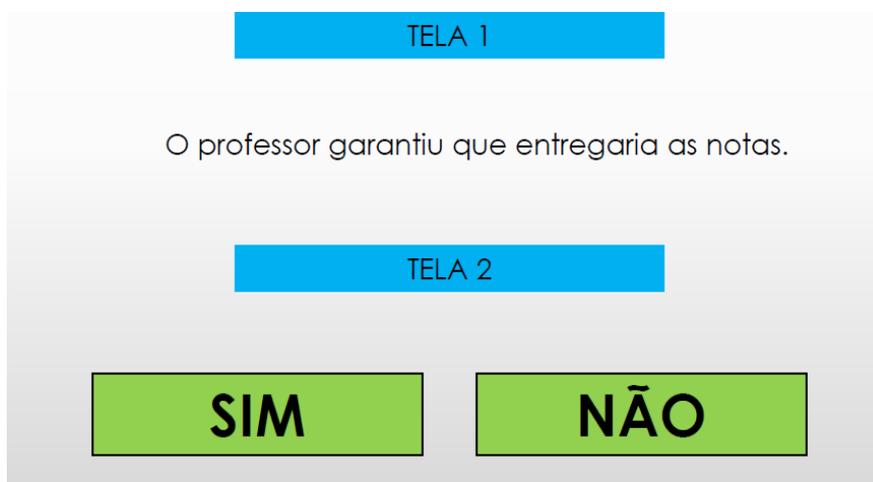


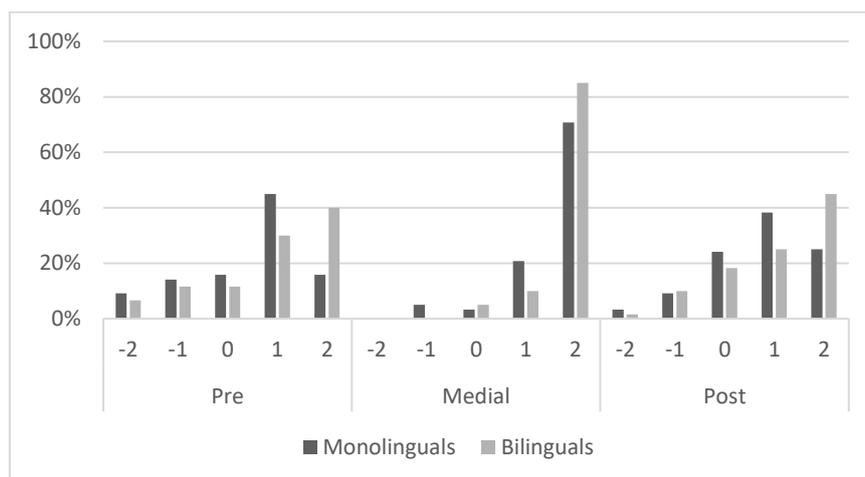
Figure 2. Experiment – yes-no questions.

5. Main results

Data were analyzed for two aspects: acceptability judgement (Likert scale) and reading times for the critical segment, as a function of clitic collocation. We ran separate ANOVAS for monolinguals and bilinguals.

5.1. Acceptability judgements

For acceptability judgements, the distribution of responses in the Likert Scale is showed in Graph 1:



Graph 1. Distribution of choices in the Likert Scale %.

Clitic medial position in the verbal complex is the best evaluated one by both monolingual and bilingual speakers. As far as the pre-position is concerned, the majority of the evaluations considers the sentence acceptable (completely acceptable or almost completely acceptable), but there are more bilinguals totally accepting the sentence than there are monolinguals, who tend to not consider it completely acceptable. The fact that similar behavior is also attested for post-nominal position seem to indicate that BP speakers are very unsure about clitic collocation. There is, however, an interesting behavior attested: post-position evaluation seems to be subjected to a satiation effect (Snyder 2000), that is, non-accepted sentences tend to be more and more evaluated as accepted as exposition to them increases. Thus, we observed each participant's behavior comparing the first two and the last two evaluations given to those sentences. As mentioned, positive evaluation to clitic post-position increases, suggesting a satiation effect, whereas clitic pre-position receives less positive evaluation for the last two evaluations, both by monolingual and bilingual speakers, even though bilinguals evaluate them as more acceptable than monolinguals do.

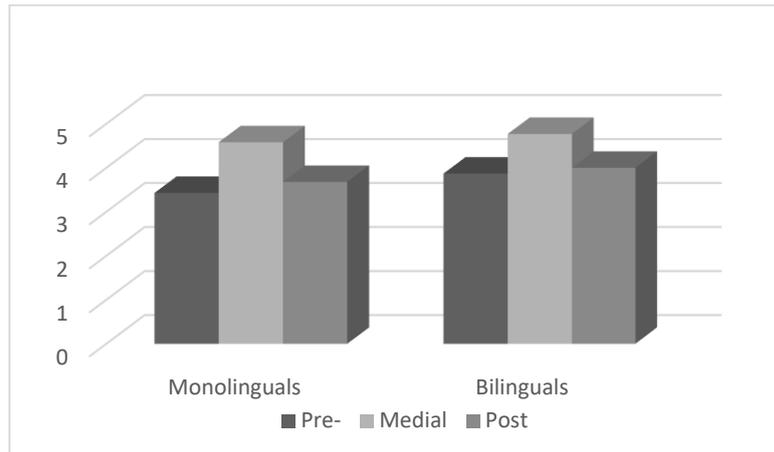
Table 1. Satiation effects.

Position	Sentences pair	Monolinguals	Bilinguals
Clitic pre-position	First pair	68,3%	76,6%
	Last pair	53,3%	68,3%
Clitic post-position	First pair	50%	56,6%
	Last pair	76,6%	83,4%

Source: Authors' elaboration.

We also ran an analysis considering the attribution of points to the scale.³ Medial position was the most accepted one, both by monolingual (mean = 4.58), and bilingual speakers (mean = 4.77).

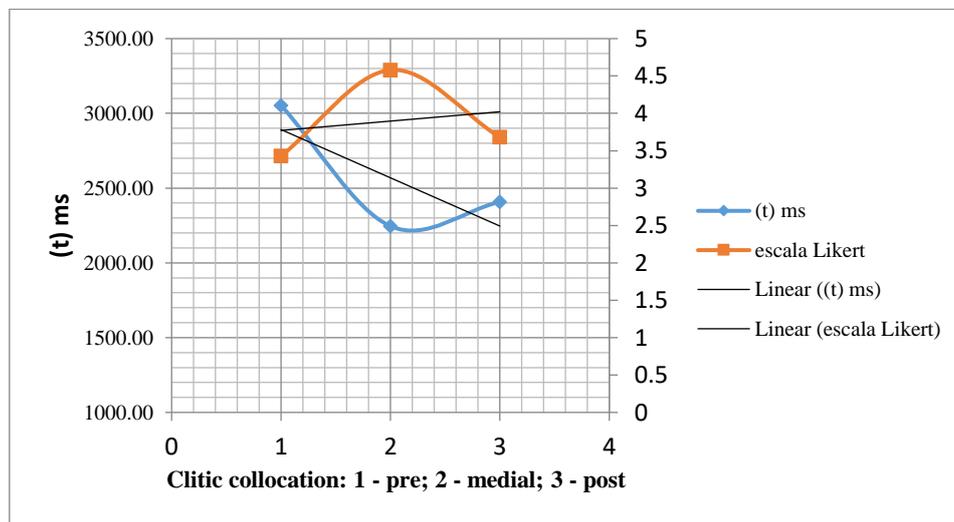
³ These values were the results of a mean from the sum of the chosen points of the scale (graded from 0 to 5, from the least acceptable to plainly acceptable) for all the trials in each condition (pre-/medial/post-position) per participant.



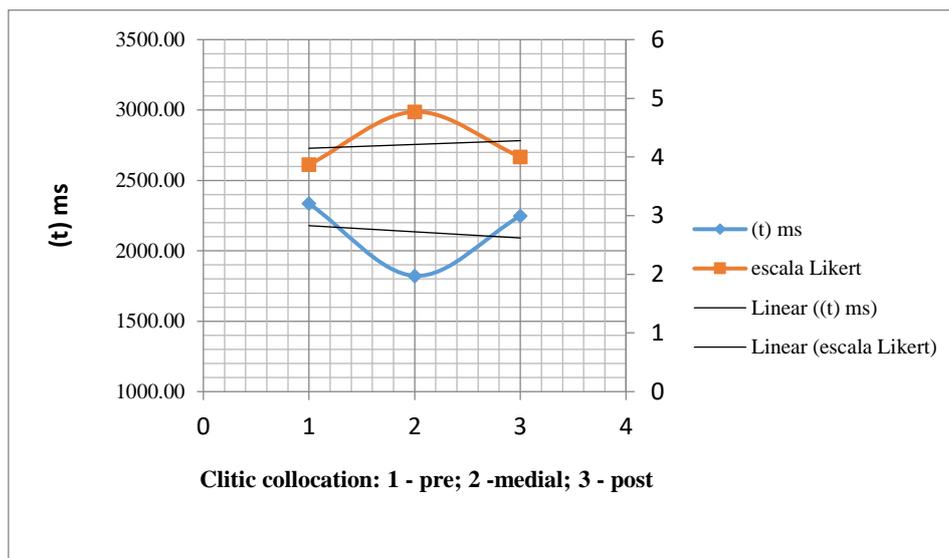
Graph 2. Means of acceptability as a function of clitic collocation (max score = 5).

For monolinguals, ANOVA shows a main effect of clitic position ($F(2.58) = 40.8$, $p < 0.000001$). Pairwise comparisons indicate significant statistical difference between medial and both pre-position ($t(29) = 10.71$, $p < 0.0001$) and post-position ($t(29) = 6.96$, $p < 0.0001$). The same tendency is attested with bilinguals. There is a main effect of clitic position $F(2.28) = 10.8$, $p < 0.0003$) and pairwise comparisons also show significant statistical difference between medial and both pre-position ($t(14) = 4.21$, $p < 0.0009$) and post-position ($t(14) = 0.60$, $p < 0.5602$).

We have also observed the relation between the amounts of time spent (decision time) and the choice of the Likert scale by each group for each condition, as Graph 3 and Graph 4 show:



Graph 3. Likert Scale/response time (monolinguals).



Graph 4. Likert Scale/response time (bilinguals).

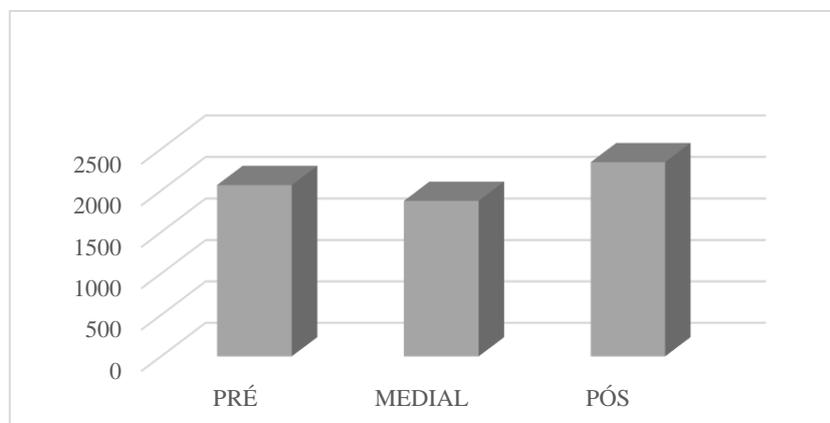
In general, these relations show that bilinguals tend to be faster in their decisions than monolinguals and that, for both monolingual and bilingual speakers, the more time spent in evaluation, the least acceptable the sentence is considered. For medial position, it means that less time is spent in evaluating these sentences, which receive the highest scores in terms of acceptability. It is in relation to pre-position (clitic climbing) that the larger difference of time is observed between monolinguals and bilinguals for deciding on the value of the Likert scale. Bilinguals are about 800ms faster and accept this kind of sentence more (bilinguals: 2335.07ms; monolinguals: 3053.18ms). The difference in decision time for the other two types of sentences (medial and post-positions) are less expressive (medial position (around 400ms) – bilinguals: 1822.55ms; monolinguals: 2245.57ms/post-position (around 200ms – bilinguals: 2247.69ms; monolinguals: 2407.86ms).

Thus, in an off-line evaluation task, both monolingual and bilingual speakers behave similarly insofar as the medial position for the clitic is the most accepted one. Moreover, the analysis of the data also shows that more bilinguals tend to consider the clitic pre-position (clitic climbing) as completely acceptable, whereas monolinguals do not reject that position, but tend to evaluate it as not totally accepted. Bilinguals are also faster in deciding on the value to the sentences, particularly for the sentences showing clitic climbing.

5.2. Reading times

As for reading times of the critic segment (presenting the clitic in pre-, medial, or post-position), we have obtained some distinction between monolingual and bilingual speakers. ANOVA for monolingual data shows a main effect of clitic collocation ($F(2,58) = 13.4, p < 0.000017$). Pairwise comparisons show significant distinctions in all pairs: pre- versus medial position ($t(29) = 2.39, p < 0.0234$), pre- versus post-position ($t(29) =$

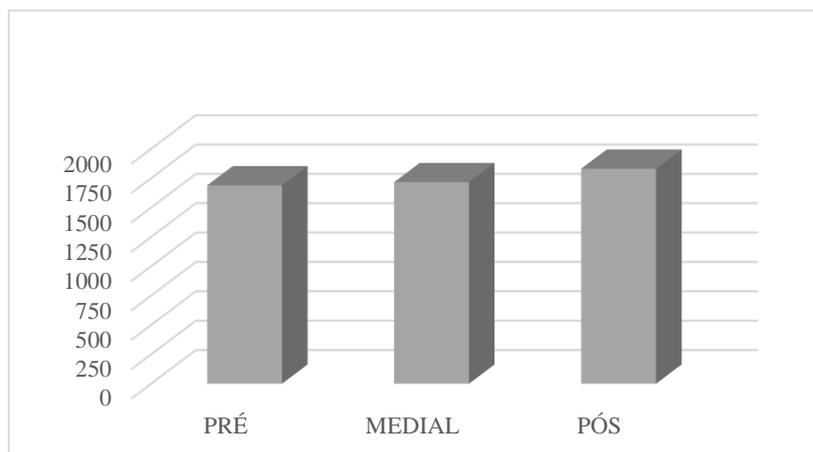
2.94, $p < 0.0063$), and medial *versus* post-position ($t(29) = 4.77$, $p < 0.0001$), with faster reading times for the medial (mean = 1876.7ms) and the pre-clitic positions (mean = 2067.16ms) in relation to the post-clitic position (mean = 2342.14ms).



Graph 5. Reading times means as a function of the clitic position - Monolinguals (ms).

These results suggest that the medial position is indeed the most natural one, followed by the pre-position, being the post-position felt as the most weird one.

As for bilinguals' data, ANOVA did not return a main effect of clitic collocation ($F(2,28) = 0.771$, $p < 0.472011$). For bilinguals, the faster reading times were associated with the pre-position of the clitic, the most natural position in Spanish. However, pairwise comparisons do not show statistical significant differences between the pairs: pre- *versus* medial positions ($t(14) = 0.28$, $p < 0.7840$), pre- *versus* post-positions ($t(14) = 1.28$, $p < 0.2225$), and medial *versus* post-positions ($t(14) = 0.77$, $p < 0.4538$).



Graph 6. Reading times means as a function of clitic collocation - Bilinguals (ms).

In general, the results show that monolinguals and bilinguals differ in terms of reading times for the different clitic collocation. Monolinguals are significantly faster for the medial position, but bilinguals do not significantly differ in speed, although pre-position is the fastest critical segment read.

In relation to the segment following the critical one, no spill-over effects were attested.

5.3. General discussion

The results obtained in this study suggest that the evaluation and the processing of clitic collocation constitute an area of great uncertainty for highly educated BP speakers. Although the medial position concentrates the best evaluated scores and the fastest reading times, pre- and post-positions receive some good scores. Reading times are not so slower for those positions either. Nevertheless, one may say that the medial position is the most natural one for BP speakers. As far as pre- and post-positions, we have posited a difference between them. On one hand, schooling pressures may affect the evaluation of pre-clitic position, considered the legitimate one for Portuguese in formal use. On the other hand, the evaluation of post-clitic position may have shown satiation effects.

A not completely similar picture has been obtained for BP/Spanish bilingual speakers. Although the medial position has also been the best evaluated, pre-clitic position received the fastest reading times, cancelling an advantage for the medial position obtained for the monolinguals. Moreover, bilingual speakers showed to be faster both in reading the critical segments as well for deciding on their evaluation of the sentences.

In all, results are not robust enough to indicate an unequivocal transfer from Spanish to BP as far as clitic collocation is concerned. However, the populations seem to clearly differ in their processing of clitic collocation. What is the nature and source of difference?

We believe that distinguishing results from on-line and off-line tasks is relevant in addressing the results. In off-line tasks, the Likert scale assignment, both groups performed more similarly than in the on-line reading task. The acceptability judgements are more likely to show metalinguistic awareness. As previously mentioned, highly educated BP speakers have been exposed to clitic climbing as a prestigious form in written texts. By its turn, the easier processing bilinguals showed in reading clitic climbing sentences in the on-line task may suggest that there is some facilitation due to Spanish. This suggests that results are more likely due to a matter of processing than real transfer of representations. The reinforcement of the marked periphery rules of BP by the grammar of Spanish could explain the similarities and differences obtained in this study. That is, monolinguals and bilinguals do not differ a lot in relation to the phenomenon investigated here, but do show differences in terms of gradation, since L2 reinforces the rules available for BP speakers in their L1 marked periphery, facilitating the processing of clitic climbing.

It is also important to take into consideration that results from comprehension are more limited than production. A follow-up production technique is being planned for assessing whether production of clitic climbing in BP would be found among high-proficiency Spanish/BP bilinguals.

6. Final remarks

This study focused on reverse transfer, considering clitic collocation in verbal complexes, contrasting Brazilian Portuguese (BP) and Spanish. The fact that BP had once admitted

clitic climbing and school still tries to recover it led us to a discussion on the role peripheral grammar may play in reverse transfer issues. As highly educated BP speakers, in principle, could still admit clitic climbing, regardless of any fluency from Spanish, it was argued that only clear differences between monolinguals and BP/high-proficiency Spanish bilinguals in the rates of acceptance of clitic climbing could signal reverse transfer.

The results of a self-paced reading experimental task with a Likert scale grammatical judgment, manipulating the position of the clitic in Portuguese sentences with highly educated monolingual BP speakers and BP/high-proficiency Spanish bilinguals were not clearly conclusive. Sentences with medial clitic position, the most natural one in BP, are the best evaluated and are faster read by monolinguals. Bilinguals also tend to accept medial position better, but do not exhibit faster reading times on those sentences. Actually, they are faster in reading Portuguese sentences with clitic climbing (although there is no statistical significant difference). Moreover, both groups accept clitic climbing in written BP sentences. However, bilinguals accept it even more, and are faster in reading them.

At last, we have considered that this phenomenon in particular may be affected by influences from highly educated BP speakers' peripheral grammar, since clitic climbing can be considered as a prestigious form to be used in written texts. A more ample contrast in this issue, considering the performance of monolingual BP speakers and bilingual BP/English speakers, for example, a language which does not present clitics, may help determine the extent to which Spanish is indeed influencing clitic collocation in BP.

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