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# The acquisition of clitics in L2 Spanish

# Examining restrictions on clitic solidarity

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This study examines the mental representation of clitic object pronouns in English L2 Spanish speakers of beginning, intermediate and advanced proficiencies. We present the results of a scalar grammaticality judgment task, which examines knowledge of clitic placement in both Exceptional Case Marking (ECM) verb constructions and non-ECM (finite and modal+infinitival) constructions. Our findings suggest that these advanced L2 learners have converged on the Spanish grammar, showing high sensitivity to the restrictions placed on clitic solidarity in ECM constructions coupled with acute knowledge of the distribution pattern of Spanish clitics in non-ECM environments. We argue that this pattern supports UG-accessibility approaches to adult L2 acquisition.

#### 1. Introduction

Examining clitic syntax in the L2 Spanish of native English speakers embodies a useful testing ground for debates on UG-accessibility after the so-called critical period due to the fact that the features (and associated functional categories) underlying the target syntactic mental representation of object clitics are lacking in English¹ and, therefore, must be acquired (or not, if impossible) in the course of the L2 acquisition of Spanish. As such, testing knowledge of L2 Spanish clitics in native English speakers allows us to test between Full Accessibility (e.g. Schwartz & Sprouse 1996) and Representational Deficit approaches to L2 mental representation, specifically claiming that adults cease to have access to uninterpretable features not instantiated in the L1 (e.g. Hawkins & Hattori 2006; Tsimpli & Dimitrakopoulou 2007).

<sup>1.</sup> We are following the proposals in the syntactic literature claiming that in Spanish (and other Romances languages) clitics head their own functional projections (see note 3). We also assume, following traditional notions within Minimalist syntactic theory, that this entails a unique formal syntactic (uninterpretable) feature difference.

Importantly, clitic pronouns are frequently present in the input and some properties of the syntax of clitics are explicitly taught to L2 learners of Spanish. However, what can be gained from frequency alone and what is taught in the guise of pedagogical rules do not cover the full gamut of clitic distribution. First, these pedagogical explanations, despite a high level of observable and descriptive adequacies, target only the saliently frequent cases of clitic distribution which are unique to the language being taught (see Table 1). However, such rules do not explain the full distribution of clitic pronouns, specifically restrictions on their distribution, which result from universal syntactic constraints, as is the case in contexts of Exceptional Case Marking (ECM) structures.

The learning task for the adult native English speaker acquiring Spanish clitics is multifarious. Learners must first acquire the new uninterpretable features that give rise to unique L2 functional categories. At the same time, learners must acquire the particular language's morphophonological forms and their distribution, which can vary across Romance languages depending on other parametric properties such as infinitival movement and clitic climbing (Montrul 2004).

However, in some cases the placement of clitics is strictly delimited (universally invariable) by the argument structure of the particular verbs at hand. If adult L2 acquisition is constrained by full access to Universal Grammar (UG) then the prediction is that the universal restrictions on placement should form part of their L2 competence, perhaps, although not necessarily, even before the language-specific distribution is converged upon. If, however, adult L2 acquisition is not constrained by UG (as purported by representational deficit theories), knowledge of clitic placement in ECM contexts (whose argument structure places restrictions on clitic placement such that it diverges from the distributional pattern of Spanish clitics found in 'traditional' constructions), which is dependent upon an underlying representation of the argument structure of ECM verbs as well as an underlying representation of clitics, would not be predicted.

With this in mind, the present study focuses on L2 knowledge of the universal constraints on the distribution of multiple clitics, knowledge of which, or lack thereof, in advanced learners, provides evidence to the ongoing discussion of what is and is not attainable in terms of non-native mental syntactic representation in adulthood. Although other studies have examined L2 knowledge with similar learner groups for restructuring and causative structures, this study innovates in two ways. We examine (i) knowledge of clitic placement with verbs of perception and (ii) with multiple clitic projections at play; in other words, the universally conditioned blocking of feature percolation that requires each clitic to align strictly with the verb that projects it as its argument.

The remainder of the paper provides the background information needed to contextualize the present study, details the methodology and results of the study, and offers some discussion of the contributions made by these data.

#### 2. Previous L2 research

Liceras' (1985) study of the acquisition of Spanish clitics tested high intermediate L1 speakers of English and French to examine the acquisition of clitics with tensed verbs, infinitives, and in cases of clitic climbing and clitic doubling. While clitics do not exist in English, they do exist in French, although their distribution is partially different than that of Spanish clitics. Participants' (30 L1 English/L2 Spanish and 30 L1 French/L2 Spanish) knowledge and production of clitics was examined with data from three tasks: an oral production task, a written proficiency test, and a written composition. Considering the data from all three tasks, Liceras found that participants from both groups successfully produced clitics in all contexts. This is significant for the native English speakers, as it suggests they were able to acquire a new functional category not existent in their L1.

Yet, both groups in Liceras' study produced errors in clitic placement in finite and finite + infinitival constructions, placing clitics after tensed verbs and also placing clitics between tensed verbs and infinitives. However, these errors do not necessarily point to an inability to acquire clitic placement in adulthood. Liceras hypothesizes that the interlanguage grammars of the L2 learners might display properties that are not present in the target grammar, but were present in a previous developmental stage of the language (placement of clitics after tensed verbs occurred in Old Spanish), thus falling within the linguistic possibilities allowed by Universal Grammar. In sum, despite errors in clitic placement in certain contexts, these results provide evidence to support Full Transfer/Full Access accounts (Schwartz & Sprouse 1996), as both groups of adult learners produced clitics successfully and their clitic placement, although inconsistent with the language distribution of Spanish, was consistent with general UG-constraints.

Bruhn de Garavito and Montrul (1996) conducted a bidirectional study of the acquisition of clitics with intermediate L1 Spanish/L2 French learners and L1 French/L2 Spanish learners. Participants completed a proficiency test and two experimental tasks: a written elicited production task and a grammaticality judgment task. Like in Liceras (1985), the learners were extremely successful at producing clitics, attaining 97% accuracy on the production task. As explained by the authors, this result was not surprising given that clitics also exist in French.

Bruhn de Garavito and Montrul also found that L2 Spanish learners were successful with clitic placement in finite and non-finite contexts, displaying over

90% accuracy in grammatical contexts and between 70% and 80% accuracy in ungrammatical contexts. This suggests that the learners successfully acquired the distributional asymmetry that exists in Spanish (see Table 1). However, many participants did not score as well in contexts with clitic climbing, which the authors suggest may be due to the fact that restructuring is an additional syntactic process that may involve more than the position of the infinitive, a suggestion that influenced the choice of properties selected in the present study.

Finally, Duffield and White (1999) examined the acquisition of clitic placement in intermediate and advanced L1 English/L2 Spanish and L1 French/L2 Spanish learners with two experimental tasks: a sentence matching task and a grammaticality judgment task. Their tasks included all of the constructions examined by Bruhn de Garavito and Montrul (1996) in addition to causative VPs. They predicted that if universal properties determining clitic placement are available in adulthood, the L1 English speakers should display successful acquisition of clitics in Spanish, while L1 French speakers might display transfer effects from French in clitic climbing and restructuring constructions, as seen in the previous studies.

Consistent with the previous studies, both intermediate and advanced L2 Spanish learners displayed successful acquisition of clitic placement in finite and non-finite constructions, providing further evidence to show that adult learners of Spanish are able to acquire knowledge of clitic placement regardless of whether clitics are instantiated in their L1. Also consistent with the results of Bruhn de Garavito and Montrul (1996), participants in this study displayed errors in restructuring and causative VP constructions. This finding is particularly relevant given that restructuring and causative verbs place similar restrictions on clitic placement to verbs of perception, which we examine in the present study.

# 3. Spanish clitics

# 3.1 The learning task for the L1 English speaker

As we outlined earlier, the learning task for the adult native English learner of Spanish is not an entirely straightforward one<sup>2</sup>. Because clitics do not exist in English, the first step in the learning task is to acquire clitics, which, assuming

<sup>2.</sup> There are various accounts of the syntax of clitics, e.g. Sportiche (1996) and Uriagereka (1995) that differ crucially on whether clitics are base-generated or find their spell-out position via clitic-climbing. For the purpose of this study, we adopt the essence of Masullo (2004), which is a Minimalist account. However, given space limitations and because for the immediate purposes which account is ultimately accurate does not matter, we leave this debate aside.

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clitics in Spanish head their own functional projections, requires acquiring new L2 syntactic (uninterpretable) features that give rise to the instantiation of a new functional category for checking purposes (White 1996)<sup>3</sup>. The learner must also learn the specific distributional pattern of clitic placement in Spanish, which may also involve the acquisition of other parametric properties such as infinitival movement and clitic climbing (Montrul 2004). The distribution of clitics in Spanish in what we will refer to as 'traditional' constructions is dependent on tense and predicate complexity (see Table 1<sup>4</sup>).

Table 1. Distributional pattern of Spanish clitics

	Proclisis	Pro-endoclisis	Enclisis	Mesoclisis
Finite	<u>Te lo</u> doy.	*Te doy lo.	*Doy te lo.	N/A
Non-finite	*Te lo dar.	*Te dar lo.	Dár <u>telo</u> .	N/A
Aux/mod. + inf.	<u>Te lo</u> quiero dar.	*Te quiero dar lo.	Quiero dár <u>telo</u> .	*Quiero te lo dar.

## **3.2** Clitic solidarity

Considering the distributional pattern of clitics in the constructions mentioned above, it is important to note that the two clitics always appear together, as clitic solidarity mandates. Clitic Solidarity (Strozer 1976) refers to the fact that when multiple clitic pronouns are projected, for example, an accusative and a dative, the pronouns almost always stay together (as can be seen in Table 1). This concept is well-integrated into the instruction of Spanish as a second language and is *generally* used exclusively to teach clitic placement in the classroom. However, clitic solidarity does not hold with ECM constructions: that is, when the two clitics are both accusative arguments each belonging to one of the two verbs (see Figure 1).

<sup>3.</sup> Following Minimalism, differences across the world's languages of this type, or parametric differences, derive from variation in feature specifications or instantiation across languages. As a result, English and Spanish must have some featural difference for pronominal objects within the syntax proper, resulting in the former having strong pronouns and the latter having clitics. Whatever the specifics of these features turn out to be is precisely what the English natives need to acquire at the level of new L2 features. Following approaches that claim that clitics are heads of their own functional projection, then this means that some uninterpretable featural difference between English and Spanish obtains, whereby English lacks the feature that Spanish has that generates object clitics.

<sup>4.</sup> There are lexical biases for proclisis or enclisis preference, e.g. Ir + a + infinitive favors proclisis while preferir + infinitive prefers enclisis, yet both are grammatically available (see Thomas 2012 for details).

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Due to the unique argument structure of ECM constructions, clitic placement in periphrastic constructions containing these types of verbs does not allow for the typical pattern of clitic solidarity discussed previously. Under ECM constructions, each clitic must first Merge with the verb that selects it as an argument, forcing the clitics to separate. This occurs because the argument structures of the two verbs block feature percolation, which is otherwise available in auxiliary/modal + infinitival constructions and gives rise to optionality. In the traditional constructions, (auxiliary/modal + infinitival), the subject of the matrix verb also serves as the subject for the embedded verb. This is not the case with ECM constructions. As displayed in Figure 1, when used with a non-finite verb, ECM verbs allow different subjects for the matrix and embedded verbs, wherein the subject of the embedded verb must share identity with the accusative object of the matrix verb (i.e., PRO is co-referential with the object of the perception verb).

- Traditional construction (modal+infinitive)
  - Juan me la quería PRO cantar ayer. ('Juan wanted to sing it to me yesterday.')
  - Juan quería pro cantármela ayer. ('Juan wanted to sing it to me yesterday.')
- ECM construction
  - Juan me escuchó pro cantarla ayer. ('Juan heard me sing it yesterday.')



Figure 1. Constraints on clitic solidarity in ECM constructions

## 4. Research questions and hypotheses

The current study builds on earlier work on L2 Spanish clitic acquisition, innovating via an examination of the phenomenon of Clitic Solidarity and syntactic restrictions on its application. The purpose of testing the acquisition of ECM constructions is to determine whether L2 learners of Spanish are sensitive to this nuanced property whose characteristics fall outside the realm of their classroom learning and the majority of L2 input they receive, yet follow from universal syntactic knowledge. Our research questions are the following:

- i. Are L1 English/L2 Spanish learners able to acquire knowledge of clitic placement in traditional constructions? and
- ii. Do L1 English/L2 Spanish learners show sensitivity to clitic placement restrictions in ECM constructions?

Taking into account the learning task for the L1 English speaker, different variables are at stake in each of the constructions examined here. In order to have a target representation of clitics, the learner must acquire a new functional category as well as the features associated with this category (see note 3). At the same time, the learner must converge on both the language-specific morphophonology of the Spanish clitic forms as well as the distributional pattern of clitics, (e.g. placement with respect to finite and non-finite verbs) that, despite being universally constrained (i.e. a possibility enumerated within UG), is acquired via exposure to particular facts of the Spanish grammar. It is prudent to keep in mind that all of this is explicitly taught to classroom learners; therefore, L2 knowledge of these properties alone could be attributed to explicit instruction.

When looking at clitic placement in the traditional constructions then, where Clitic Solidarity is ubiquitously adhered to, it is seemingly not possible to determine if learners' have truly acquired the underlying representation of clitics, or if their placement knowledge (with and without Clitic Solidarity as a factor) is a byproduct of metalinguistic knowledge. Since we are interested in teasing apart possible metalinguistic knowledge from underlying competence, it becomes crucial to examine ECM constructions. Sensitivity to the universal restrictions placed on clitic solidarity in constructions with ECM verbs is not language-specific and is inconsistent with the pedagogical rules provided to L2 classroom learners (i.e., Clitic Solidarity). In these contexts, rather, clitic solidarity restrictions, if shown, must be derived from underlying knowledge of the argument structure of the lexical verbs at stake interacting with a true mental representation for the syntax of clitics.

Importantly, argument structure of these lexical verbs (ECM verbs) can be transferred from the L1. However, knowledge of clitic placement in these constructions cannot be attributed to transfer alone, as clitics themselves are not present in the L1 and their placement in these constructions does not pattern in the same way as strong object pronouns in English. Rather, we argue that knowledge of the restrictions on clitic placement in ECM constructions can result only from an underlying representation of the syntax of both the lexical verbs at stake and Spanish clitics. As such, we maintain that showing knowledge of obligatory clitic solidarity in elsewhere environments and its strict restrictions in ECM contexts can be used as a true diagnostic of clitic syntactic representation.

## Methodology

## 5.1 Participants

Participants in this study were divided into three experimental groups (beginner = 26, intermediate = 25, advanced = 14) and one control group of native Spanish speakers (= 9). Proficiency was determined by a modified version of the DELE created by the Instituto Cervantes. All participants in the experimental groups were native English speakers who began studying L2 Spanish in adulthood (mean age of onset of acquisition = 13.5). Participants in the beginner and intermediate groups had spent no more than 6 months in a Spanish-speaking country, while participants in the advanced group had spent up to 2 years abroad. All participants completed two written experimental tasks: a fill-in-the-blank placement task and a scalar grammaticality judgment and correction task. Due to space limitations, here we focus exclusively on the grammaticality judgment task.

## 5.2 Judgment task

The judgment task consisted of 116 exemplars which participants were asked to rate from 1 (completely unnatural) to 4 (completely natural). In the case that they ranked the sentence with a 1 (completely unnatural) or a 2 (unnatural), they were asked to correct the error(s) in the sentence. They were also given an option to select 'I don't know' if absolutely necessary. The task consisted of 66 counterbalanced target items and 50 fillers. The target items were counterbalanced for construction type (finite/modal + infinitival/ECM + infinitival) and clitic distribution (proclisis/enclisis/mesoclisis/pro-endoclisis<sup>5</sup>), resulting in 18 target items with finite verb constructions, and 24 each with modal + infinitival and ECM + infinitival constructions (see Table 2 for examples). Fillers consisted of sentences with adjectival clauses that were counterbalanced for grammaticality based on gender agreement and adjectival placement.

<sup>5.</sup> By pro-endoclisis, we are referring to when the clitics are separated, one in preverbal (finite) and the other in post-verbal (non-finite) position.

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Construction type/clitic placement	Example		
Finite verb *enclisis	Cocinámostelo esta noche.		
Finite verb proclisis	Juan me lo contó ayer.		
Finite verb *pro-endoclisis	Te mando la por correo.		
Modal + infinitive enclisis	Jorge quería cantármela.		
Modal + infinitive proclisis	Marisol nos la quiere traer.		
Modal + infinitive *mesoclisis	Guillermo quiere nos la traer.		
Modal + infinitive *pro-endoclisis	David me quería contarlo ayer.		
ECM + infinitive *enclisis	Vimos cocinártelo.		
ECM + infinitive *proclisis	Francisco nos la vio traer.		
ECM + infinitive *mesoclisis	Fernando oyó me lo contar ayer.		
ECM + infinitive pro-endoclisis	Te vi mandarla por correo.		

**Table 2.** Judgment task: Examples by construction type and clitic placement

#### 6. Results

The results of the judgment task are displayed in Figures 2–5 and both descriptive and inferential statistical analyses are presented here. For the inferential statistics, a repeated-measures ANOVA was computed. Results showed a significant interaction of all three variables – group, construction type, and clitic position (F(12,276)=10.748; p<0.001). Sidak adjustments were conducted for all post-hoc tests presented here.

Figure 2 shows the results of all groups in grammatical clitic placement constructions. All groups perform above chance (>2.5) in all construction types, displaying target-like clitic placement in both traditional and ECM constructions. Figure 3 shows the results of all groups in ungrammatical traditional constructions. Here there are two noteworthy patterns. First, in finite constructions with \*enclisis, the beginner group performs differently than all other groups (p < 0.002). Secondly, in modal + infinitival constructions with \*pro-endoclisis, the advanced group's performance is native-like, while the performance of the beginner and intermediate groups is not. In this construction, the native and advanced groups perform significantly differently than the beginners and intermediates (p < 0.007). This will be discussed further in the analysis of Figure 5.

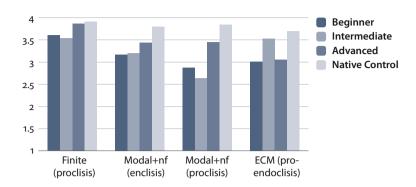


Figure 2. Judgment task: Grammatical constructions

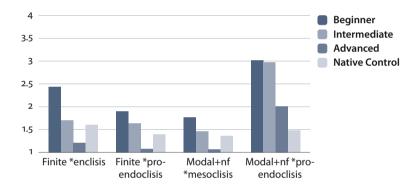


Figure 3. Judgment task: Ungrammatical 'traditional' constructions

Figure 4 shows the results of all groups with all clitic placement possibilities in ECM constructions<sup>6</sup>. For the beginner group, there are no significant differences across the ECM constructions based on clitic position, suggesting that this group does not make a clear distinction between grammatical and ungrammatical placement in these constructions. The intermediate group makes a distinction between all three placement options included in the analysis – \*enclisis/\*proclisis/proendoclisis – (p < 0.001). The advanced group makes a distinction between \*enclisis and the remaining clitic placement options (p < 0.001), and the native control group distinguishes between all three (p < 0.031).

**<sup>6.</sup>** Constructions with mesoclitic placement were not included in any of the statistical analyses discussed here, although they appear in the figures.

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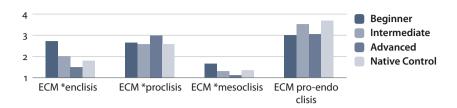


Figure 4. Judgment Task: 'ECM + infinitival' constructions

Figure 5 shows the results of all groups in cases of pro-endoclisis, where clitic solidarity is broken (in other words, the clitics are separated). In the cases of finite and modal+infinitival constructions, this is ungrammatical, whereas in ECM constructions this is the only grammatical placement option. Here we focus on the distinction made by both the advanced group and the native controls between grammatical pro-endoclitic placement in ECM constructions and ungrammatical pro-endoclitic placement in modal+infinitival constructions. Pairwise comparisons returned no significant differences across groups in ECM constructions with pro-endoclisis, suggesting that all groups show target-like knowledge of clitic placement in ECM constructions, where clitic solidarity is broken. However, in modal + infinitival constructions with \*pro-endoclisis, the native and advanced groups perform significantly differently than the beginners and intermediates (p<0.007). These two groups (advanced and natives) reject this ungrammatical placement, whereas the beginner and intermediate groups do not appear to do so. While all groups seemingly accept pro-endoclisis in ECM constructions, only the advanced experimental group is actually sensitive to the restrictions placed on clitic solidarity exclusively in ECM constructions, as this group displays target-like knowledge in both modal+infinitival and ECM constructions, making a clear distinction between these two construction types.

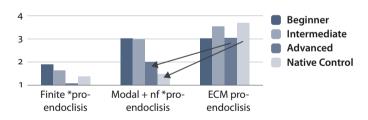
This treatment of this counterbalance difference as shown in the advanced group, which has no difference as compared to the natives, is crucial to the claim that their system for pronominal clitics is Spanish-target-like. The advanced performance can be interpreted as strong evidence that they have attained a target mental representation for pronominal clitics in addition to target knowledge of the accompanying language-specific constraints on clitic placement.

The intermediates' and beginners' performance in relation to this crucial counterbalance only tells us definitively that they do not have the Spanish system (i.e. they do not seem to know to the extent of the natives and the advanced participants that clitic solidarity is obligatory as an elsewhere condition); however, it does not necessarily tell us that they do not have a target representation for clitics. This is the case since, as we have argued throughout, the only condition able to show underlying syntactic knowledge are ECM constructions where clitic

solidarity becomes ungrammatical. This was argued since: (i) this environment embodies the only one, among the tested contexts, in conflict with the general patterns of Spanish; (ii) the overgeneralization of pedagogical instruction would rule this out and (iii) there is a relative low frequency of ECM constructions in the input, a byproduct of which means that the preponderance of positive evidence, that being aux/modal+infinitival constructions, in the input reinforces (ii).

Again, the lower proficiency groups do demonstrate knowledge that clitic solidarity does not apply in ECM constructions, however, they simply do not seem to know that this is not what Spanish opts for in other periphrastic constructions. Since the latter is not something that derives from universal restrictions, while the former (ECM constructions) does, failure to show complete knowledge of clitic placement in traditional periphrastic constructions while showing knowledge in ECM constructions does not preclude the possibility that their underlying syntactic representation is target-compliant. Of course, it does not prove that the underlying representation is target-like either, since the pattern noted can simply reflect a "yes" bias. It is simply neutral on this front. In other words, the data are neutral in terms of any definitive conclusion we can make for the beginner and advanced groups based on this experiment alone.

Nevertheless, our ultimate goal for the study is one of determining whether or not the acquisition of clitics is possible, and so the best data to be used to answer such a question must come from the advanced group in any case, since any innovations in lower levels of proficiency can be attributed to the process of learning itself and do not necessarily say anything about ultimate attainment potential.



**Figure 5.** Judgment task: Pro-endoclisis across construction type (breaking clitic solidarity)

Finally, in all intergroup comparisons, for any given item type, the native and advanced groups never perform differently, although the beginner group differs from the natives over 50% of the time and the intermediate group does twice (out of nine comparisons). This trend shows a clear development based on increasing proficiency, something that should not be surprising under either a UG-accessibility or representational deficit account.

#### Conclusions

The data presented here provide significant results to answer our research questions. First, all experimental groups display knowledge of clitic placement in grammatical constructions in traditional constructions. These results confirm those of previous studies (Liceras 1985; Bruhn de Garavito & Montrul 1996; Duffield & White 1999) which purported that intermediate and advanced L2 learners show knowledge of clitic placement in traditional constructions. Further, our results show that even beginner L2 learners display some knowledge of clitic placement in traditional constructions.

Secondly, these data show that advanced L2 learners make a clear distinction between ECM constructions and traditional aux/modal + infinitival constructions when faced with the pro-endoclisis clitic position, accepting grammatical pro-endoclisis placement in ECM constructions where syntactic restrictions do not allow for clitic solidarity, and rejecting ungrammatical pro-endoclisis placement in modal + infinitival constructions where clitic solidarity holds based on placement distribution specific to Spanish. The beginner and intermediate groups, despite displaying target-like knowledge of clitic placement in the grammatical categories, do not unambiguously make this distinction.

Based on these results, we have shown that advanced learners are sensitive to the inherent restrictions placed on clitic solidarity (despite ambiguity in the input, low frequency, and instruction to the contrary), which is strong evidence to suggest they have successfully acquired the underlying syntax of clitics and, crucially, are thus able to integrate them accordingly when confronted with the unique argument structure of ECM periphrastic constructions.

As such, our results support Full Access approaches to UG in adulthood and it is not clear how they would be explained by Representational Deficit approaches, which would predict that English speakers of L2 Spanish cannot acquire target mental representations for clitics, the syntactic features and functional categories at stake being absent in the L1. To be clear, we acknowledge that Representational Deficit accounts do not preclude *learning* of certain properties of clitics, but such knowledge should be restricted to what is learnable from input patterns and explicit instruction. However, the L2 learners in this study clearly project knowledge beyond the confines of this.

Given the influential role that explicit instruction plays in this particular instance of adult L2 acquisition of Spanish, we aim to carry out future examination of the acquisition of clitics by naturalistic L1English/L2Spanish learners (i.e., non-classroom), which we believe would provide an insightful basis for comparison with these data.

#### References

- Bruhn de Garavito, Joyce & Silvina Montrul. 1996. "Verb-movement and clitic placement in French and Spanish as a second language". *Proceedings of the 20th Annual Boston University Conference on Language Development*, 123–134. Sommerville, Mass.: Cascadilla Press.
- Duffield, Nigel & Lydia White. 1999. "Assessing L2 knowledge of Spanish clitic placement: converging methodologies". *Second Language Research* 15:2.133–160.

DOI: 10.1191/026765899668237583

- Hawkins, Roger & Hajime Hattori. 2006. "Interpretation of English multiple wh-questions by Japanese speakers: A missing uninterpretable feature account". Second Language Research 22:3.269–301. DOI: 10.1191/0267658306sr2690a
- Liceras, Juana M. 1985. "The value of clitics in non-native Spanish". Second Language Research 1:2.151–168.
- Masullo, Pascual J. 2004. "Clitics aren't Climbers!" (Unpublished manuscript). University of Pittsburg, Pittsburg.
- Montrul, Silvina. 2004. The Acquisition of Spanish: Morphosyntactic development in monolingual and bilingual L1 acquisition and adult L2 acquisition. Amsterdam & Philadelphia: John Benjamins. DOI: 10.1075/lald.37
- Schwartz, Bonnie & Rex Sprouse. 1996. "L2 cognitive states and the full transfer/full access hypothesis". Second Language Research 12.40–72. DOI: 10.1177/026765839601200103
- Sportiche, Dominique. 1996. "Clitic constructions". *Phrase structure and the lexicon* ed. by Johan Rooryck and Laurie A. Zaring, 213–276. Dordrecht: Kluwer.

DOI: 10.1007/978-94-015-8617-7\_9

- Strozer, Judith. 1976. Clitics in Spanish. Ph.D. dissertation, UCLA
- Thomas, Danielle. 2012. *Grammatical Optionality and Variability in Bilingualism: How Spanish-English bilinguals limit clitic-climbing*. Ph.D. Dissertation, The University of Toronto.
- Tsimpli, Ianthi & Maria Dimitrakopoulou. 2007. "The interpretability hypothesis: Evidence from wh-interrogatives in second language acquisition". *Second Language Research* 23:2.215–242. DOI: 10.1177/0267658307076546
- Uriagereka, Juan. 1995. "Aspects of the syntax of clitic placement in western Romance". *Linguistic Inquiry* 26:1.79–123.
- White, Lydia. 1996. "Clitics in L2 French". *Generative perspectives on language acquisition* ed. by Harald Clahsen, 335–367. Amsterdam & Philadelphia: John Benjamins.

DOI: 10.1075/lald.14.14whi