Pragmatic Consequences of P-movement and Focus Fronting in L2 Spanish: Unraveling the Syntax-Discourse Interface

Tania Leal Méndez and Roumyana Slabakova
The University of Iowa

1. Introduction

As is widely known, the ultimate outcomes of language acquisition for second language adult learners and child (L1) acquirers vary widely in terms of convergence and optionality (variability) (Bialystok & Miller, 1999; Bley-Vroman, 1990; Coppiers, 1987; DeKeyser, 2000; Johnson & Newport, 1989, 1991; Long, 1990; Sorace, 1993). Normal child L1 acquisition is virtually guaranteed to be uniform and convergent (Guasti, 2002; Snyder, 2008), whereas adult second language is usually non-convergent, displaying various degrees of optionality. Within the generative paradigm, various SLA researchers have proposed representational deficit approaches to account for this variability, or “residual optionality” (Sorace, 2000) in L2 learners’ judgments. A subset of these researchers claims that the locus of optionality is at specific interfaces between modules. One such proposal is the Interface Hypothesis (Sorace, 2011; Sorace & Filiaci, 2006; Tsimpli & Sorace, 2006; Sorace & Serratrice, 2009).

In essence, the Interface Hypothesis (henceforth IH) proposes that while L2 learners (at the end state) can successfully acquire narrow syntax properties, they are predicted to undergo permanent learnability problems (optionality) at the external interfaces (i.e., Syntax-Discourse). Although properties involving narrow syntax and the so-called internal interfaces have been shown to not be acquirable to the same degree (White, 2009) and to suffer developmental delays (Lardiere, 2009), these are conjectured to be ultimately acquirable. On the other hand, the IH proposes that properties at the Syntax-Discourse interface undergo more permanent developmental problems. In terms of the source of these problems, Sorace (2011) notes that the possible sources of optionality could be the result of multiple factors (or a combination thereof), including: (i) underspecification of interpretable features, (ii) processing costs of interface structures, (iii) bilingual processing (e.g. lack of automaticity in bilinguals), (iv) differences in input, and (v) differences in executive control in bilinguals. On the other hand, RDH account for them in terms of uninterpretable features, which are argued to be impossible to acquire if these are not represented in the L1 grammar.

As the study of generative language acquisition has progressed, the linguistic phenomena under study have been ever-expanding (see White (2009) for a review). Presently, generative L2 research at the external interfaces is a rapidly expanding field, albeit one that has expanded somewhat asymmetrically. This uneven expansion could be, at least theoretically, the source of the lack of consistent conclusions on the topic. In spite of the growing number of studies related on the IH, findings have not been definite or uncontroversial and are thus far from conclusive. Furthermore, there are relatively few phenomena that have been studied (e.g., distribution and availability of post-verbal subjects). Moreover, these studies have only been conducted in a few (mainly Romance) languages (e.g., Spanish, Italian, English, Bulgarian). Despite these facts, and however inconclusive at this stage, the studies on the Syntax-Discourse interface have added to our understanding of the nature of linguistic systems, especially those of learners at the near-native stage.

The current study has as its objective to test the IH as related by two pragmatically constrained properties in Spanish: P-movement and Focus Fronting. Presently, research at this interface has been

2. Theoretical assumptions and description of the properties investigated

2.1. Global assumptions

We assume the syntactic architecture proposed in Chomsky (2000). In his proposal, the numeration is an operation in which the lexical items are ordered into a lexical array. The computational system (CHL) assembles a set of lexical items, which are drawn from the numeration though three operations: Merge, Move, and Agree. All parametrized differences are found in the lexicon. Regarding clause structure, Chomsky argues that the "core" structure of the clause is constituted of four heads (i.e. C, I, v, and V). The derivation comes about in phases, which are particular subsets of the structure (i.e. vP and CP). Phases can be infinite in length (due to recursion) and are not visible to higher probes, except for their edges (i.e. Spec, vP and Spec, CP). The particular analysis used (López, 2009) will be covered in section 3.2.

2.2. Description of the interface properties: P-movement and Focus Fronting

Erteschik-Shir (2007) notes that one of the most frequently explored connections between Information Structure and Syntax is the propensity of languages to order information in specific ways (e.g., given information before new). In this regard, there seems to be wide consensus among linguists that, in languages like Spanish, the linear order of constituents is related to what is contextually determined to be old versus new information. Terms such as topic and focus have been traditionally used in the literature to signal these distinctions, although the exact definition of these terms varies substantially from author to author. These notions (i.e., topic vs. focus) are expressed in different ways across languages (e.g. movement vs. phonological destressing; c.f. Vallduvi & Engdahl, 1996). Moreover, these encoding mechanisms can involve morphology, syntax, prosody, or a combination of these elements (Lozano, 2009). Among the many syntactic configurations that have been argued to play a role in information structure are dislocations (right and left) and moved objects (P-movement, in Zubizarreta’s (1998) terms).

2.2.1. P-movement

P-movement gets its name from Zubizarreta’s (1998) proposal that the movement of constituents is triggered by a prosodic requirement. Specifically, Zubizarreta argues that the requirement is that a focused constituent must be the lowest in the tree so that it can receive accent according to the (Romance) Nuclear Stress Rule (henceforth NSR). There are two types of P-movement, which result in two possible orders: VOS and [S]VPPO. These will be referred to as P-movement type 1 and 2, respectively. As mentioned earlier, P-movement is a syntactic configuration that is interface-conditioned. In other words, P-movement can only be felicitous in certain pragmatic contexts, related to the expression of new and old information. The following examples (a examples from Zubizarreta, 1998: 30), illustrate how focus is expressed in English and Spanish. The following examples are possible answers to: “Who ate an apple?”

(1)  
   a. JOHN ate an apple.  
   b. *Ate an apple John.  
   (SVO)  
   (*VOS)

(2)  
   a. Comió una manzana Juan.  
   b. # Juan comió una manzana.  
   eat-past.3.sg. an apple Juan  
   (#SVO)  
   (VOS: p-mov. 1]

As (1b) shows, P-movement type 1 (the movement of the object past the subject) is only available in Spanish. (2a) shows that Juan, which is focus, is at the very end of the sentence. Consequently, this position has been argued to be compatible with focus interpretations. In an all-focus context, the linear
order in Spanish is different. The following are answers to “What happened?” (Examples from Zubizarreta, 1998: 125.)

(3)  

<table>
<thead>
<tr>
<th>Example</th>
<th>Order</th>
<th>Parsing</th>
<th>Translation</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. María me regaló una botella de vino.</td>
<td>SVO</td>
<td>Maria CL gave-past.3.sg a bottle of wine</td>
<td>María gave me a bottle of wine.</td>
<td></td>
</tr>
<tr>
<td>b. Me regaló una botella de vino.</td>
<td>VO</td>
<td>Maria gave me a bottle of wine.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. #Me regaló una botella de vino María.</td>
<td>#VOS</td>
<td>#Maria gave me a bottle of wine.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note that although (3c) is infelicitous in this context, it is felicitous as the answer to “Who gave you a bottle of wine?” Finally, a relevant fact is that if the intonational nucleus (marked in all CAPS in 4a) is on the subject rather than the object, a contrastive focus interpretation obtains (Zubizarreta, 1998: 125).

(4)  

<table>
<thead>
<tr>
<th>Example</th>
<th>Order</th>
<th>Parsing</th>
<th>Translation</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. MARÍA me regaló la botella de vino (no Juan).</td>
<td>VOS</td>
<td>Maria CL gave-past.3.sg the bottle of wine (not Juan)</td>
<td>María gave me a bottle of wine (not Juan)</td>
<td></td>
</tr>
</tbody>
</table>

The second type of P-movement arises when one of two arguments of a verb moves so that the other can be in focus position. An example of P-movement type two is represented below (examples from Zubizarreta, 1998). These are the possible answers to the question “What did María put under the table?”

(5)  

<table>
<thead>
<tr>
<th>Example</th>
<th>Order</th>
<th>Parsing</th>
<th>Translation</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. #María puso el libro sobre la mesa.</td>
<td>VPPO</td>
<td>Maria put-past.3rd.sg the book on the table</td>
<td>María put the book under the table</td>
<td></td>
</tr>
<tr>
<td>b. María puso sobre la mesa el libro.</td>
<td>[p-mov. type 2: (S)VPPO]</td>
<td>María put-past.3rd.sg the book on the table</td>
<td>“Maria put the book under the table”</td>
<td></td>
</tr>
</tbody>
</table>

In short, the different possible clausal orders in Spanish are intrinsically related to the articulation of certain types of information structure. Specifically, while SVO and VSO can convey narrow focus on the object or wide focus (all-focus) VOS is (exclusively) reserved for narrow focus on the subject. The second type of P-movement ([S]VPPO) conveys narrow focus on the object.

### 2.2.2. Focus Fronting

A widely accepted definition of Focus is presented in Jackendoff (1972). In his view, focus is the resolution of a variable open in the discourse. This is exemplified below (Jackendoff, 2002: 208), where “Pat” resolves the variable opened by “who”.

(6)  

<table>
<thead>
<tr>
<th>Example</th>
<th>Order</th>
<th>Parsing</th>
<th>Translation</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>J: Who went to the party?</td>
<td></td>
<td></td>
<td>“Who went to the party?”</td>
<td>“Pat went to the party”</td>
</tr>
<tr>
<td>K: PAT went to the party.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This can be thought of as ‘regular’ focus. Importantly, in Spanish, a focus constituent can be displaced. López (2009) terms this Focus Fronting (FF). An example of Focus Fronting (modified from López, 2009: 34) is below:

(7)  

Context: You gave him the spoons.  
LOS CUCHILLOS le di.  
“I gave him THE KNIVES” (or THE KNIVES, I gave him).

López notes that the constituent in caps has a double function: it both opens and resolves a variable (note that the context in (7) does not open the variable). Contrastive focus (as opposed to regular focus) does not answer a wh-question, but opens a quantificational domain. The facts discussed in this section are summarized in Table 1.
Table 1. Spanish clausal orders and contexts in which these are pragmatically acceptable

3. Previous analyses of P-movement

3.1. P-movement as prosodic movement

Movement instances such as those in (2a) have been traditionally analyzed following Zubizarreta (1998). Zubizarreta makes use of two stress rules to formulate her hypothesis, in which she argues that P-movement is the resolution of any conflict arisen between these two rules. The first rule is the Nuclear Stress Rule (NSR), reproduced below.

(9) Nuclear Stress Rule (Romance): Given two sister categories Ci and Cj, the one lower in the asymmetric c-command ordering is more prominent.

The second stress rule is the Focus Prominence Rule (henceforth FPR), stated below.

(10) Focus Prominence Rule: Given two sister categories Ci (marked [+F(ocus)]) and Cj (marked [-F(ocus)]), Ci is more prominent than Cj.

Zubizarreta argues that when the NSR and the FPR clash (i.e. where a constituent is marked [+F] and, crucially, it is not the lowest category in the asymmetric c-command ordering), P-movement applies, so that the constituent marked [+F] is the lowest category. Note the examples below.

(11) a. María puso el libro sobre la mesa. (before P-movement: SVOPP)

   María put-past.3rd.sg the book on the table

   [+F]

b. María puso sobre la mesa el libro. (after P-movement: SVPPO)

Therefore, while English uses destressing to render a defocalized element metrically invisible, Spanish uses movement of the non-focused material out of a focus position. Consequently, Zubizarreta proposes that the source of the VOS order in Spanish is VSO with scrambling of the object past the subject (which is argued to stay in situ). Thus, both VOS and VPPO are generated through P-movement. These instances of object scrambling are unlike Germanic scrambling in that they do not depend on definiteness.

Crucially, Zubizarreta’s analysis of P-movement is based on it being altruistic, meaning that movement is not motivated by feature checking. Regarding the timing of P-movement, Zubizarreta’s proposal is that the movement applies at the end of the syntax, just before spell-out (but after the NSR). The point in the structure where the feature [F] can be introduced into the derivation is where a single phrase marker has been derived. Zubizarreta terms this point “Σ-structure”.

3.2. López’s analysis: P-movement and FF as feature-checking movement

López’s (2009) analysis builds on Chomsky’s (2000) concept of phase. Chomsky proposes that (transitive) vP and CP are phases because they share two crucial roles. The first being that the head of

---

1 López clarifies that by “sisters,” Zubizarreta implies “metrical sisterhood” (López, p. 180)
2 Note that although López argues that P-movement is not prosodically motivated, he retains the name.
each phase (i.e. v and C) triggers movement, while the second (López’s main focus) is that the phase is the point at which the syntax interfaces with the interpretive systems. López’s approach to information structure is as follows. He proposes that the output of the syntax is an object \( \Sigma \), which includes interpretive information. The output of the pragmatics is \( \Sigma[p] \), which is the same syntactic object \( \Sigma \) but “augmented with the features assigned by pragmatics and which consequently is ready to be mapped onto a discourse structure” (p. 22). vP and CP are the points that interface with the interpretive modules. The schematization of his proposal (p. 23) is below:

\[
\begin{align*}
\text{Discourse} & \xrightarrow{\Sigma[p]} \Sigma \\
\text{Pragmatics} & \xleftarrow{C_{\text{II}}} \Sigma \\
\text{Lexicon} & \end{align*}
\]

López is critical of the central notions of Topic and Focus as they have been traditionally covered in the literature. In his view, neither of these accurately captures the dislocation facts of Romance, and, accordingly, he proposes that TopP and FocP be eliminated from the theory of grammar. In place of Topic and Focus, López proposes the binary features \([\pm \text{anaphoric}] \) and \([\pm \text{contrastive}] \). The feature \([\text{anaphoric}] \) means that a dislocate is obligatorily related to an antecedent in the discourse. The feature \([\text{contrast}] \) signifies that a constituent moves to the Left Periphery and opens up a domain of quantification. The combination of \([\pm \text{a}] \) and \([\pm \text{c}] \) describes the structures under study, as in (13):

\[
\begin{align*}
\text{a. Focus Fronting (FF)} & \rightarrow [-a, +c] \\
\text{b. Rheme} & \rightarrow [-a, -c] \\
\text{c. P-movement} & \rightarrow [+a, -c]
\end{align*}
\]

Remember that vP and CPs are phases, and as such, they are positions associated with a certain interpretation when an element moves to its specifier (i.e. vP with \([+a]\), CP with \([+c]\)). The structure López provides for P-movement \([-c, +a]\) is represented in (14), while the structure for Focus Fronting \([+c, -a]\) is illustrated in (15):
López’s crucial divergence from Zubizarreta’s analysis is that for López P-movement is triggered by an unvalued feature (in the vein of case-driven movement), not by prosodic requirements. Thus, prosody is a consequence of the resulting syntactic structures (i.e., movement and syntactic dependencies), and not the other way around. Additionally, López argues that, since P-movement alters c-command relations (Ordoñez, 1998; Zubizarreta, 1998), it must take place within narrow syntax. The problem with Zubizarreta’s account, according to López, is that, by hypothesis, P-movement is motivated by prosody, and thus involves only the syntax-phonology interface, not narrow syntax. López thus concludes that Zubizarreta’s P-movement “is a syntactic operation that presupposes a computational system with a considerable look-ahead” (2007: 181), which he argues is an undesirable theoretical outcome.

Thus, López’s binary features [±a] and [±c] allow for a more fine-grained analysis of syntax-discourse interface. This might allow us to test Sorace’s assumption that the external interface is a homogeneous (i.e. monolithic) locus of optionality. As noted in (10), P-movement and Focus Fronting differ only in one binary feature when compared to Rheme: Rheme is [-a] while P-movement is [+a]. Both constructions are [-c], so that feature is kept constant. Similarly, Focus Fronting is [+c], while Rheme is [-c]. In this case, both constructions are [-a], so this feature is kept constant. CLLD and CLRD are not included in the structures tested because they are not maximally comparable (given that these structures require syntactic knowledge of clitics). If learners converge on one but not both of the structures, we could make conclusions regarding the relative difficulty of acquiring the features [±a] vs. [±c].

4. Research Questions

According to the Interface Hypothesis, L2 learners are predicted to undergo permanent learnability problems at the external interfaces. If learners can acquire these properties, this would constitute evidence that, for at least some structures, the properties at this interface are not necessarily predestined to optimality. The current study was designed to answer the following research questions:

(i) Can adult L2 English-natives learners of Spanish acquire the syntactic requirements of P-movement and Focus Fronting, as well as the pragmatic conditions in which these appear?
(ii) In case that only one of the properties is acquired, do adult L2 English-natives learners of Spanish show a discrepancy between the acquisition of Focus Fronting and P-movement? In López’s terms, which feature ([+a] or [+c]), if any, is more difficult to acquire?
5. Learning Task

Given that English has no P-movement, the learning task for native English speakers is multifaceted. For P-movement type 1, learners must be able to scramble the arguments of the verb when the object is focus. For P-movement type 2, learners must acquire the syntactic requirements on the availability of post-verbal subjects when the subject is focus. Additionally, learners must successfully associate the syntactic structures with the appropriate interpretations. We also consider that the acquisition of P-movement and its associated interpretations constitutes a Poverty of the Stimulus problem. This is because knowledge that the P-moved elements are biased towards a specific interpretation is not available in the input. Furthermore, incorrect usage would not lead to breakdowns in communication. Additionally, P-movement is not the subject of classroom instruction.

Regarding Focus Fronting, the learning task for native English speakers of Spanish is arguably an easier one. Given that Focus Fronting is grammatical in English, if we assume transfer, learners should have a relatively easy time acquiring the structure. The transfer is not straightforward, however, as there are several differences between these languages. A difference between FF in English and in Spanish is the resulting word order. This difference is due to the verb moving higher (e.g. to Spec, TP), not to a difference in Information Structure per se.

\[\begin{align*}
(16) & \quad \text{a. THE BEANS, Harry cooked.} & \text{(OSV)} \\
& \quad \text{b. *THE BEANS, cooked Harry.} & \text{(*OVS)} \\
(17) & \quad \text{a. *LOS FRIJOLES Harry cocinó.} & \text{(*OSV)} \\
& \quad \text{b. LOS FRIJOLES cocinó Harry.} & \text{(OVS)}
\end{align*}\]

Another difference is that in Romance, except for Portuguese and, arguably, some speakers of Mexican Spanish, according to López (but contra Belletti, 2004, Rizzi, 1997, Samek-Lodovici, 2005, inter alia), there is no low contrastive focus, only Focus Fronting. The following example is frequently cited as an example of contrastive focus in Italian:

\[\begin{align*}
(18) & \quad \text{CONTEXT: You gave the winner a T-shirt.} \\
& \quad \text{No. Abbiamo dato al vincitore una MEDAGLIA.} \\
& \quad \text{No we-have given to-the winner a medal} \\
& \quad \text{“No. We gave the winner a medal.”}
\end{align*}\]

López argues that there is, indeed, an opening and closing of a variable, but in this case, the functions are split among different constituents. The negation at the beginning of the sentence fulfills the “contrastive” part, while una medaglia has the function of “focus.” When the negation is removed, the result is infelicitous.

\[\begin{align*}
(19) & \quad \text{CONTEXT: You gave the winner a T-shirt.} \\
& \quad \text{#Abbiamo dato al vincitore una MEDAGLIA.} \\
& \quad \text{“We gave the winner a medal.”}
\end{align*}\]

English, on the other hand, does not seem to have such restrictions. López touches on this fact only briefly, referring to López and Winkler’s (2003) proposal that UG might provide assignment for [+c] at the CP and vP edges. They propose that these rules are ranked (for English) in the following way:

\[\begin{align*}
(20) & \quad \text{Assign [+c] in Spec, C >> Assign [+c] in Spec,v}
\end{align*}\]

Based on these facts, we assume that the learning task for FF in Spanish for native English speakers include the knowledge that contrastive focus is only available at the outer edge of the CP.
6. Research participants and methodology

6.1. Participants

Forty-seven native speakers (NS) of Spanish from a variety of countries (Spain, Mexico, Honduras, Venezuela, Chile, Colombia, and Cuba) constituted the control group for the experiment. The learner group (n=90) was further divided into three sub-groups based on a proficiency test: an advanced group (n=25), an intermediate group (n=19), and an intermediate-low group (n=46), all of whom were adult learners of Spanish, native English speakers. The mean age for the control group was 34.82 yrs., and 24.56 yrs. for the learner group. In the control group, the only dialect excluded was Argentinean Spanish, since there is evidence that there are additional prosodic facts that play a role in these structures (Labastía, 2006).

6.2. Measure of Proficiency

We used a modified version of the DELE (Diploma de Estudios de Lengua Española--Certificate of Spanish Language Studies), which is a standardized test distributed by the Spanish Education Ministry. The modified test included in the study (as used in Montrul, 2002) consists of a vocabulary section and a grammar cloze test. Additionally, the proficiency test included a brief background questionnaire. The test, as well as the main task, was delivered via the Internet.

6.3. Task

We used a contextualized acceptability task. The participants were presented with a context, which was read by two native speakers of Spanish and also presented as text in the computer screen. After each context, two answers were presented. These were also presented in text and aural form. The participants were asked to judge each answer in a 4-point Likert scale, from 1 (very strange) to 4 (very natural). The option “I don’t know” was also included. All contexts and answers were in Spanish. The aural stimuli were included to control for an alteration to the prosody (e.g. the possibility of participants assigning mental stress to a given constituent), as this change could have an impact on the acceptability of phrases. Table 2 summarizes the conditions and number of tokens for each condition. The tokens and answers were randomized. Note that SVO was excluded as an option because it is a ‘default’ order in Spanish/English. Condition 5 included a set with a locative adverb (there) instead of a PP to test phonological weight effects. The test was did not have a time limit, but most participants completed it within an hour.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Word Orders</th>
<th>#</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-P-movement, type 1</td>
<td>VSO, #SVO</td>
<td>6</td>
<td>[-c, +a]</td>
</tr>
<tr>
<td>2-P-movement, type 2</td>
<td>(S)VPPO, #SVOPP</td>
<td>6</td>
<td>[-c +a]</td>
</tr>
<tr>
<td>3-Focus Fronting</td>
<td>OVS, #SVOPP</td>
<td>6</td>
<td>[+c,-a]</td>
</tr>
<tr>
<td>4-Rheme</td>
<td>(S)VO, #VOS</td>
<td>6</td>
<td>[-c, -a]</td>
</tr>
<tr>
<td>5-P-movement, type 2 with a locative adverb instead of a PP</td>
<td>(S)V[there]O, #SVO[there]</td>
<td>6</td>
<td>[-c +a]</td>
</tr>
<tr>
<td>6-Fillers</td>
<td>-</td>
<td>6</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2. Tokens and conditions for the experimental task.

3 Exclusion in the experimental group was done through a background questionnaire.
4 López argues that Mexican Spanish does not have FF, but I’ve found many NS that disagree with this judgment. Additionally, while excluding a native Mexican group would be relatively easy, controlling for exposure in the L2 group to such a common dialect would prove difficult.
A sample test item (condition 1, P-movement, type 1, VOS, #SVO) is presented below:

(21) (Context and answers originally in Spanish). Myriam and Araceli are friends and coworkers. Yesterday was Araceli’s day off and there was a birthday party at the office. Araceli heard that someone had eaten a piece of the cake before the party started, but she didn’t know who had done it. She asked Myriam:

Araceli: So, who ate the cake?

(a) Myriam: Según supe, el pastel se lo comió Carlos.

“According to what I found out, Carlos ate the cake.”

1 (very strange) 2 3 4 (very natural) I don’t know

(b) Myriam: #Según supe, Carlos se comió el pastel.

“According to what I found out, Carlos ate the cake.”

1 (very strange) 2 3 4 (very natural) I don’t know

7. Results

A repeated-measures ANOVA was conducted to compare the ratings for all conditions. There was a significant condition effect (F(9, 125) = 71.318, p < .0001), and a significant condition by group interaction (F(27, 381) = 5.969, p = .0001.), indicating that there were differences in ratings among the different conditions across groups. Tukey HSD tests were used as post hoc analyses to further determine differences between groups.

The mean group responses by the four participant groups in the study for Rheme (VSO, #VOS) and Focus Fronting are given in Figure 1 below.

![Figure 1. Mean ratings of acceptability of Focus Fronting and Rheme in context](image)

As Figure 1 illustrates, the control group made the relevant contrast between the felicitous vs. infelicitous structures in the both the FF (p < 0001) and Rheme conditions (p < 0.001). All learner groups made the relevant distinction in the Rheme condition (p < 0.001 for all three learner groups), but none reached significance in the FF condition (p < 0.31, p < 0.064, p < 0.172 for the advanced, intermediate and low intermediate groups, respectively).
Figure 2. Mean ratings of acceptability of P-movement in context

Figure 2 shows the mean group responses by the four participant groups in the study for P-movement type 1 (VOS, #VSO), P-movement type 2 with a PP (VPPO, #VOPP) and P-movement type 2 with a locative adverb (V[there]O, #VO[there]). In the P-movement type 1 condition, the native group made a significant distinction between felicitous and infelicitous sentences ($p < 0.001$). The advanced and intermediate groups also made this relevant distinction ($p < 0.001$, and $p < 0.002$, respectively), whereas the low intermediate group did not reach significance ($p < 0.064$). For P-movement type 2, with a full PP, neither the control nor the advanced groups made the expected relevant distinction between the sentences ($p < 0.218$, and $p < 0.443$, respectively). The two intermediate groups made a distinction, but in the wrong direction. In the last condition, P-movement type 2 with a locative adverb, only the control group made the relevant distinction between the felicitous and infelicitous sentences ($p < 0.001$).

8. Discussion

The results of the study indicate that judging the felicity of some properties seem to pose no problem for learners, even at the intermediate stage of proficiency. Specifically, the data of the participant groups on the Rheme condition indicates that all the learner groups were able to make a distinction between discourse-dependent VSO and #VOS in context (Rheme condition), rejecting VOS in all-focus contexts. Furthermore, two of the learner groups (advanced and intermediate) were also able to discriminate between VOS and #VSO (P-movement type 1) in context, rejecting VSO when the subject was new information. Note that none of these structures are grammatical in English and all are grammatical in Spanish—they diverge only in their pragmatic felicity in context.

It is interesting to note that although the control group made the relevant felicity distinctions for these two properties (Rheme and P-movement type 1), the natives did not accept them as being “very natural.” Their mean judgments for the Rheme condition average at the “sounds natural” point in the Likert scale, (3.17 out of 4) while it stands below that (2.77 out of four for P-movement type 1). Our intuition is that the natives are ranking these word orders (VOS and VSO) with another possibility in mind: SVO, which seems to be a natural default. Although it has been argued (e.g. Zubizarreta, 1998) that SVO with intonational nucleus on the subject (see example 4a above) implies a contrastive interpretation, it is possible that the subjects can come up with a situation where this interpretation is not incompatible with the context. This could be clarified in further research, testing native judgments for these two properties with three possible options (answers): VSO, SVO and #VOS (Rheme and VOS, #SVO, and #VSO for P-movement type one. Ideally, the data elicited would include not only judgments but also production data, so that we could determine where the natives place the intonational nucleus. Importantly, possibility is not disallowed in the Spanish grammar, although it has been argued to be dispreferred.
Although the IH in its latest clarification (Sorace, 2011) makes the case that its predictions hold only for specific groups (i.e. near-natives, simultaneous child bilinguals, and L1 attrition populations), we join other researchers (Lardiere, 2011; White, 2011) in our belief that developmental data from advanced and even intermediate learners is vital to understanding the near native data by way of comparison. This seems to be the case in at least some of our conditions, as we witnessed a developmental trend in their acquisition. Additionally, the results of this study confirm prior research (e.g. Belletti et al, 2009; Rothman 2008) in that the IH seems to apply somewhat selectively, with some properties being more difficult to acquire than others. The next step is to find a way to determine the source of this relative difficulty. Under López’s analysis, given that these two structures (Rheme and P-movement type 1) involve the feature [+a], we can draw the tentative conclusion that anaphoricity (as defined by López) does not seem to be a major hurdle for these learners. Additionally, prior research (Ivanov, 2009; Slabakova et al, 2011) has shown that the acquisition of Clitic Left Dislocation (CLLD), which is also [+a] (albeit [+c] as well), is possible.

In contrast, in the condition of Focus Fronting (which is [+c, -a]), our learners were not as successful, as they did not make the relevant distinctions between the two conditions. It may well be that our learners were not proficient enough, as at least one other study (see Slabakova et al, 2011) has shown that the successful acquisition of this property at the near-native stage is indeed possible. The lack of success of the learners in this structure is particularly perplexing, given that this is the only property for which transfer from their native English is possible. As mentioned earlier, there are some differences between these two structured in Spanish and English, which could be the source of the difficulty. However, this possibility seems somewhat unlikely given that our stimuli differed in word order only (compare (16) versus (17)), and our learners had no problem in the Rheme and P-movement 1 conditions in terms of the availability of post-verbal subjects. Given that we did not independently test for this knowledge, the possibility that this difference may account for their performance cannot be discarded.

Additionally, the native data on the second type of P-movement (resulting in VPPO) is rather puzzling, as it did not confirm what we expected from the linguistic literature. Namely, the natives did not make a relevant distinction between VPPO and #VOPP. We conjecture that this might be due to dialectal differences. Our native speakers, although belonging to different dialects, including caribbean and peninsular, were mostly speakers of Mexican Spanish, with over half of them being tested in Mexico. Additional testing, including production data, is necessary to draw any more definite conclusions on the subject. This testing should ideally be conducted with monolingual populations tested in their native countries, in order to avoid any transfer possibilities. Remember that English uses prosody to signal these distinctions, so bilingual populations may resort to this possibility, which is not disallowed by their Spanish grammar. It is interesting, however, that when the PP was replaced by a locative adverb, we found the relevant distinction (V[there]O vs. #VO[there]). This might be an indication that, indeed, the descriptions in the linguistic literature might have to take in consideration, in addition to possible dialectal differences, either phonological weight or the status of the PP. Again, additional research is granted to test these notions.

In sum, we conclude that our data show that there is a developmental trend in the acquisition of these properties and that, for some structures at least, there was no evidence of residual optimality. In terms of the source of the optionality that was indeed found (e.g. Focus Fronting), our methodology does not allow us to comment on language processing, as our main task was not timed. Sorace (2011) proposes that a possible source of residual difficulty is the less efficient processing of structures at this particular interface by L2ers is the very nature of their bilingualism. She notes that this might be due to (i) less developed representations (see Clahsen & Felser, 2006) or (ii) less efficient access to these representations. Sorace argues that there is no evidence of “Shallow Processing” (Clahsen & Felser, 2006) in near natives, and thus the natural contender is the lack of efficiency (automaticity) in integrating properties at the interface. Testing these properties with a different methodology might allow for us to understand the role that processing might play in the acquisition of structures at the Syntax-Discourse interface.
References


Proceedings of the 11th Generative Approaches to Second Language Acquisition Conference (GASLA 2011)

edited by Julia Herschensohn and Darren Tanner

Cascadilla Proceedings Project Somerville, MA 2011

Copyright information
Proceedings of the 11th Generative Approaches to Second Language Acquisition Conference (GASLA 2011) © 2011 Cascadilla Proceedings Project, Somerville, MA. All rights reserved
A copyright notice for each paper is located at the bottom of the first page of the paper. Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information
Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:
Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, sales@cascadilla.com

Web access and citation information
This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as: