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MAURIZIO SANTORO

**THE DELAYED DEVELOPMENT OF THE DISCOURSE-  
PRAGMATIC PROPERTIES OF NULL AND OVERT SUBJECTS IN  
SPANISH L2 GRAMMARS: A REPRESENTATIONAL OR  
PROCESSING PROBLEM?\***

**Abstract**

The present study has investigated whether the late L2 acquisition of discursive features of Spanish null and lexical subjects is due to an underlying pragmatic impairment on learners' part, or derives from their inability to cope with the demanding processing task. Adult English speakers learning Spanish were examined in their use of Spanish lexical subjects in focused contexts, and their interpretation of intra-sentential null and overt pronouns. Results have shown that participants encountered a lot of difficulty placing subjects in postverbal position and identifying the appropriate antecedents of anaphoric expressions. The problem, however, does not result from their failure to activate the required cognitive processes. These inconsistencies are attributable to learners' incomplete pragmatic competence. The syntactically encoded discursive properties of Spanish subjects have been particularly complicated to account for. In any event, contrary to previous L2 studies, no visible L1 transfer effects have been observed in their L2 advanced grammar.

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*Keywords:* null subject pronouns, discursive features, accessibility, prominence, Spanish anaphors, PAS, pragmatic impairment.

**1. Introduction**

The acquisition of null and overt pronominal subjects in L2 settings has been extensively investigated in the last thirty years. Within the Principles and Parameters theoretical framework

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(Chomsky, 1981), the native-like use of these external arguments by L2 learners is usually attributed to the correct (re)setting of the more general Pro-Drop Parameter. Many of their syntactic properties are, in fact, associated with this parameter, namely:

- the omission of pronominal subjects in declarative clauses, as in (1),

(1) Hablo                    español.  
       [I] speak-PRES Spanish  
       'I speak Spanish.'

- the free inversion of the subject with its governing verb in simple clauses, as in (2),

(2) Llegó                Juan.  
       arrive-PAST John  
       'John has arrived/arrived.'

- the extraction of a *wh*-phrase functioning as a subject from a subordinate clause containing the complementizer *que* 'that', without producing a *that-trace effect* violation, as in (3),

(3) ¿Quién dijiste    que llegó?  
       who [you] say-PAST that arrive-PAST  
       'Who(m) did you say has arrived/arrived?'

- the presence of empty presumptive subject pronouns in embedded clauses, as in (4),

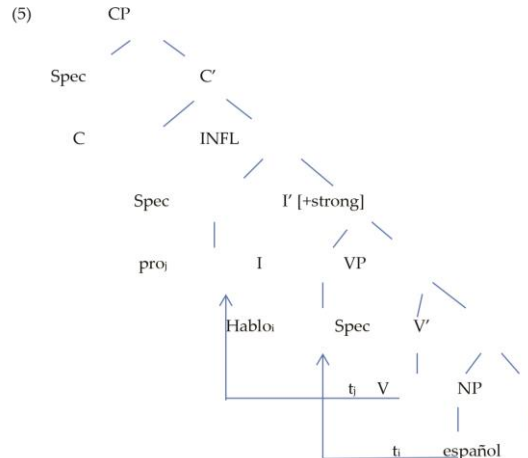
(4) María llamará    a Juan cuando    tiene            tiempo.  
       M.<sub>i</sub> call-FUT to J.    when [she<sub>i</sub>] have-PRES time  
       'María will call Juan when she has time.'

The well-formedness of these constructions has been attributed to the fact that a tensed INFL-head carries strong nominal features. As such, it is able to license a phonetically null (referential) pronominal element *pro* that has moved to its Spec-position (see, Chomsky, 1981; Jaeggli, 1982; Rizzi, 1982, among others). Empty categories are

permitted as long as they can be licensed and their content can be recovered (Rizzi, 1986). These two conditions are captured under the general Empty Category Principle (ECP) described below.

- (i) An empty category must be governed by an appropriate head.  
(*formal licensing*)
- (ii) An empty category must be chain-connected to an antecedent.  
(*identification*)

In brief, a null element (*pro*) needs to be licensed and its phi features (person, number) be recovered. As previously indicated, in Spanish, this operation may take place at the INFL-node level, since this projection contains the nominal features needed. Within this analysis, (1) will have the following syntactic representation (unnecessary projections omitted).



As we can see, the verb *habl-o* has moved to the head position of the INFL-projection to check its morphological features, whereas *pro*, generated in the subject canonical position (Spec-VP), has raised to the Spec-position where its content can be recuperated. Once licensed, it

will be also capable of checking the subject's nominative features; thus satisfying the Extended Projection Principle (EPP) according to which a sentence must have a subject.

In sum, languages like Spanish allow the presence of null elements because of their extensive verb inflection. As a consequence, subject pronouns can be omitted in declarative or embedded clauses, and lexical subjects can be inverted with their governing verbs (see, p. 4 for a more detailed explanation of the latter construction). The lack of that-trace effect with *wh*-constructions seems to be also linked to the feature strength of the INFL-node. A tensed inflection, in fact, is able to properly govern the preverbal trace left behind by the movement of the *wh*-phrase to the matrix sentence, avoiding any ECP violation.

Since all these syntactic properties derive from the ability of the language to license null elements, they have been grouped under one general parameter, identified as the Pro-Drop Parameter. Usually, languages have been classified as being pro- or non-pro-drop linguistic systems according to whether or not they have this capability.

From an L2 acquisition perspective, this entails that a native-like use of the constructions previously described will result from a (re)setting of the parameter to the appropriate value. Parameters, in fact, operate like switches that need to be moved to the on- or off- position, depending on the typology of the two languages involved. For instance, speakers of a non-pro-drop language (e.g. English) need to turn it on when learning Spanish, or other pro-drop languages. On the contrary, it will be turned off when the opposite situation occurs. This also implies that, once the parameter has been properly reset, all the related syntactic properties should be acquired/lost almost simultaneously by L2 learners.

New developments in linguistic theory that have resulted from a greater attention to the discursive aspects of a language, have challenged the original idea that correlates the peculiar syntactic behavior of null pronouns solely to the morphological richness of the verb system. Basically, their distribution does not seem to be exclusively determined by morphosyntactic factors, but it is also governed by specific discourse-pragmatic rules. In other words, a strong INFL-node is not the sole syntactic licenser of *pro* that would allow the use of silent preverbal

arguments or phonetically realized postverbal subjects. Specific discourse relations need to be taken into account for their appropriate selection and interpretation, especially when they occur in bi-clausal constructions. According to Cinque (2002), Cardinaletti (2004), and Rizzi (2004), a syntactic structure is made of the canonical projections as well as those functional categories that are responsible for the licensing of discursive and prosodic elements. They postulate the presence of two additional functional categories labeled as *Topic* and *Focus*. They are base-generated right above VP, and may be filled depending on the interpretation of the subject of the sentence. For instance, the postverbal argument, *Juan*, in (2, repeated here as 6b) below provides some information that was previously unknown to the interlocutor. Pragmatically, it is interpreted as a presentationally focused external argument that has been selected out of an unlimited set of entities. In Spanish, this special meaning is conveyed by placing the focused constituents in sentence-final position, as shown below.

- (6) a. Quién llegó?  
       who arrive-PAST  
       ‘Who has arrived/arrived?’
- b. Llegó Juan.  
           arrive-PAST Juan  
           ‘Juan has/arrived’.

Syntactically, this particular word order is obtained as follows. The strong focus head, *Foc<sup>0</sup>*, contains the uninterpretable feature [+Focus]. As such, it attracts the subject of the sentence containing interpretable focus features to its specifier position for feature checking purposes. This operation takes place in a Spec-head configuration, and will result in the deletion of the uninterpretable focus feature of the head before the derivation reaches Spell-Out. The verb, base-generated in VP, will then raise to TP to check its morphological features. The focused subject does not need to undergo any additional movement since the uninterpretable [D] and phi features of the head T are able to license the non-overt expletive subject (*pro*) moved to its Spec-position. In this analysis, (6b) will have the following syntactic representation.

- (7) [CP.....[TP pro.....llegó.... [ToP [FocP Juan [VP .....]]]]]  
 (adapted from Belletti, 2004: 25)

In sum, the displacement of the focused subject in Spec-FocP is dictated by its peculiar discursive features. In fact, the canonical S(ubject) V(erb) word order would be pragmatically inappropriate in these particular contexts, as indicated in (8b) below.

- (8) a. Qué pasó?  
       what happen-PAST  
       ‘What happened?’  
       b. ??Juan vino.  
           J. come-PAST  
           ‘Juan came.’

Pragmatic factors also play a crucial role in the distribution and interpretation of null or overt pronominal subjects occurring in bi-clausal structures. In general, a lexical subject in preverbal position is normally interpreted as given topic-like information. As such, it cannot co-refer with an overt external argument in the embedded clause, since lexical pronouns usually signal a shift of topic and focus. In these particular cases, the most appropriate co-referent would be a null pronominal form, being an unfocussed element (see, 9 below).

- (9) María dió un beso a su mamá cuando salió de su casa.  
       M.<sub>i</sub> give-PAST a kiss to her mom when [pro<sub>i</sub>] leave-PAST from her  
       house  
       ‘María gave her mom a kiss when [she] left the house.’

Here, the use of a lexical subject co-referring with the one of the matrix clause would be pragmatically inappropriate. It would most likely refer back to *su mamá* ‘her mother’, or an external entity. In sum, subject realization in Spanish and other pro-drop languages is sensitive not only to specific syntactic properties (i.e. the presence of a pro-licensor), but also the discourse-pragmatic constraints of topic-shift and focus.

It is worth noting that, unlike narrow syntax, which is a quite closed-in system, discursive pragmatics is a more dynamic linguistic field. It may also extend to other aspects of human knowledge such as cognition and/or psychology. Carminati (2002, 2005), for instance, claims that a pragmatically motivated parsing process may also be activated to establish the correct selection and interpretation of intra-sentential overt or null pronouns. This strategy identified as Position of Antecedent Strategy (PAS) states:

A null pronoun prefers an antecedent which is in the Spec-IP position (or in the AgrS position under Pollock's split INFL hypothesis), while the overt pronoun prefers an antecedent which is not in the Spec-IP position.

(Carminati, 2002: 33, cited in Filiaci, 2010: 172)

This general tendency to look for antecedents located in particular syntactic positions is motivated by universal pragmatic principles, as highlighted in the *Accessibility Theory* (henceforth: IT, Ariel, 1990, 1994). According to this theory, referring expressions should be viewed as 'accessibility markers' whose use "is directly related to how accessible these entities are in the minds of the speaker and the hearer" (Carminati, 2002: 13). Each expression exhibits a particular level of accessibility in the mental representation of the participants in the discourse. For instance, names, definite descriptions, demonstratives, and stressed pronouns display a very low or even zero degree of accessibility, whereas unstressed or cliticized pronouns, agreement markers, and reflexives are considered to be extremely high accessibility markers (see, Accessibility Marking Scale, Ariel, 1990: 73). This classification is not arbitrary, but universal since it applies cross-linguistically, and is based on three universal coding principles, namely, (i) informativity (the amount of information a referential expression encodes), (ii) rigidity (how uniquely it identifies an entity), and (iii) attenuation (its phonological size) (see, Ariel, 2006 for a more detailed explanation). According to these three principles, NPs are generally considered to be highly informative and phonologically quite conspicuous markers. Null pronouns are less informative and phonologically absent. Overt pronouns, on the other

hand, have less informational content than NPs, but are more informative and score higher than null pronouns on the attenuation scale.

The level of prominence of these expressions in the discourse plays a crucial role in establishing the correct co-referential relationships with their antecedents. In general, highly informative, rigid and phonologically more noticeable expressions retrieve less prominent and poorly visible antecedents. Conversely, informationally poor expressions would, in general, correlate with phonologically conspicuous antecedents. More specifically, a preverbal subject located in Spec-IP (the most prominent position) will usually co-refer with the least informative expression, i.e. the null-subject of the embedded clause. Overt pronouns, which are not considered to be as salient as preverbal NPs, will correlate with those located in a less prominent position (complement-of-the-verb position). In fact, as previously indicated, if we were to insert the subject pronoun *ella* 'she' in (9) above, it would most probably refer back to María's mother, rather than María, herself.

In brief, PAS can help select the appropriate antecedents of anaphoric expressions by identifying their level of prominence and saliency in the discourse which is determined by the syntactic positions they occupy. In other words, by relying on this parsing strategy, a speaker should be able to establish the "correct pronoun-antecedent dependencies in real-time language use" (Sorace, Serratrice, Filiaci & Baldo, 2009: 462).

As we can see, the correct distribution and interpretation of Spanish null and overt subjects requires a multifaceted linguistic expertise, ranging from syntax to pragmatics as well as a good use of specific cognitive and processing mechanisms. This is of great theoretical relevance since it indicates that pro-licensing may be a necessary, but not sufficient condition for the occurrence of null subjects in a language. Additional discourse factors need to be taken into consideration, and particular cognitive processes need to be triggered for a more complete and accurate formulation of these arguments.

From an acquisition standpoint, this entails that a native-like use of pronominal subjects (null or overt) in L2 settings requires (i) an extensive knowledge of the verb system of the target language, especially with

regard to its morphological richness, (ii) a good competency of how the discursive-pragmatic features of its pronouns are accounted for, and (iii) a great familiarity with language-specific processing strategies (i.e. PAS).

Unfortunately, recent research on near-native or bilingual grammars (Belletti, Bennati & Sorace, 2007; Serratrice, Sorace & Paoli, 2004; Sorace & Filiaci, 2006, among others) has reported that this multilayered expertise is hard to obtain. According to the *Interface Theory* (henceforth: IT, Sorace, 2003, 2004), constructions involving different linguistic domains create more acquisition problems than those including only one single linguistic component. Coordinating syntactic and pragmatic information is a complex acquisition task to accomplish, inherently far more difficult than just acquiring narrow syntax. Very often, it is the case that strictly syntactic properties of a parameter are fully mastered, whereas the acquisition of those features involving other linguistic and cognitive domains is further delayed.

Several L2 or bilingual studies have, indeed, indicated that the occurrence of null arguments in declarative clauses and lexical subjects in postverbal position often do not correlate. An almost native-like use of null arguments in these structures is not usually paired with a similar performance involving overt postverbal subjects. Belletti et al. (2007) have, in fact, reported that English-Italian bilingual children exhibited a native-like use of null arguments in matrix sentences, indicating that they must have reset the parameter to the Italian value. However, they have also shown a greater preference for lexical preverbal subjects than Italian natives in the so-called 'out-of-blue' contexts (see, 10 below).

- (10) Exper. - Chi parlerà?  
               Who speak-FUT  
               'Who will speak?'  
               ,  
       Subject - ?? Gianni parlerà.  
               John speak-FUT  
               'John will speak.'



Similar idiosyncrasies have also been encountered in the distribution and interpretation of lexical and null subjects in bi-clausal structures. Their target-like performance with the null subjects of the embedded clauses was not paralleled with the use of their lexical counterparts. In most cases, overt pronouns were erroneously interpreted as the semantic antecedents of the matrix external arguments, as in (11).

- (11) \*La mamma<sub>i</sub> dà un bacio alla figlia, mentre lei<sub>i</sub> si mette il cappotto.  
 The mother give-PRES a kiss to-the daughter while she put-PRES the coat  
 'The mother kisses the daughter while she puts on the coat.'

Several L2 studies on the acquisition of Spanish subjects (see, Pérez-Leroux & Glass, 1997, 1999; Licerias & Díaz, 1999; Lozano, 2003, 2006a, b, among others) have reported an analogous situation. Similar to Belletti et al.'s results, data have shown that L2 learners had more difficulty in properly using Spanish null/overt subjects when they required some pragmatic knowledge of the target language than when they solely involved a morphosyntactic competence.

In sum, data from different linguistic scenarios clearly suggest that the discursive conditions regulating the selection of intra-sentential null or overt subjects are acquired much later than their syntactic properties, and there is no strong indication whether they will be finally attained.

Despite the uniformity of the results obtained, and the general reservations regarding the full mastery of these features, there is no widespread consensus among L2 researchers on what may have determined such an acquisition delay.

Several L2 scholars (Hertel, 2003; Lozano, 2006a, b; Serratrice, 2007; Serratrice et al., 2004; Sorace, 2003, 2004; Tsimpli, Sorace, Heycock & Filiaci, 2004, among others) have attributed it to learners' underdeveloped pragmatic knowledge of the target language. Such an impediment results from the interaction of various negative factors. First, according to Sorace's IT, processes taking place at interface levels are inherently more difficult to master. In fact,

Learning the efficient coordination of multiple factors involved in the choice of pronominal forms is a demanding task that requires many years of exposure to be completely acquired and that may be particularly taxing for bilingual [or L2] speakers. (Sorace & Serratrice, 2009: 174)

Secondly, learners may find themselves at loss, when L2 input provides evidence that the interpretable focus features are encoded syntactically. In other words, they may be unaware of the fact that word order could also convey different information values, and some discursive traits of the subjects are realized syntactically. This may cause confusion and indecisiveness in making the appropriate choice, especially when these features are provided through different devices in their L1 (e.g. intonation). Thirdly, the input the learners are exposed to is often unclear since the same verb may display an SV or VS word order depending on the context. Fourthly, little or no formal instruction is provided on subjects' distribution and interpretation, either in the classroom or in textbooks. Finally, incorrect word order or infelicitous interpretation of these arguments do not hinder comprehensibility or determine ungrammaticality.

Very often, their pragmatic incompetence may even prompt learners to rely on what they already know, namely their native language. Elements traceable to their L1 grammars have been frequently noticed in their L2 data, especially when they are acquiring a pragmatically more complex pronominal system (e.g. Italian, Spanish) than their own (e.g. English, Dutch, or German). Lozano's (2006a) research has, in fact, shown that advanced English learners of Spanish have a tendency to not only ignore the VS word order in Spanish focused contexts, but they also seem to faithfully emulate the preverbal subject position of their first language. Similarly, Sorace et al. (2009) have reported that English-Italian bilingual children rarely produce structures with postverbal Italian subjects in presentational settings. In addition, they frequently interpret Italian overt subject anaphors as co-referring with the lexical subject of the matrix sentence. Such a behavior has been attributed to a negative impact of English grammar since these bilingual children appear to closely

reproduce the word order and the semantic interpretations of their dominant language.

It is worth noting, however, that such L1 effects are only recognizable in these particular contexts, and do not involve other constructions. Advanced L2 learners, in fact, do use null subjects in declarative clauses in a target-like manner, indicating that cross-linguistic influence is not as pervasive as the *Full Transfer/Full Access Hypothesis* (henceforth FT/FA, Schwartz & Sprouse, 1994, 1996) would predict. It only affects the pragmatic aspect of the Pro-Drop Parameter.

Other L2 researchers claim that the acquisition discrepancies reported in bilingual or near-native grammars are not due to learners' pragmatic deficiency, but to their inability to activate the required cognitive processes and parsing strategies. In other words, the preference for the erroneous SV word order in presentational contexts and the incorrect semantic interpretation of intrasentential anaphoric expressions are not determined by an underlying representational impairment. They result, on the contrary, from a poor use of mechanisms that are cognitive and psychological in nature. Recall, PAS establishes precise discursive-pragmatic correlations between referring expressions and their antecedents. These semantic dependencies are usually guided by the levels of prominence and accessibility the referential expressions involved provide. Although their ranking is universal, their inventory varies across languages. For instance, Spanish, being a pro-drop language, uses a more distinctive set of expressions to indicate the different degrees of accessibility (e.g. NPs, overt and null pronouns). English, on the other hand, as a non-pro-drop language, does not display such an extensive selection since it lacks the null pronominal option. As a consequence, its overt unstressed pronouns may also refer to topic antecedents. In addition, prominence relations are syntactically encoded in Spanish, whereas in English "the distance between a previous and a current mention of the entity is an important factor in determining the degrees of accessibility." (Ariel, 2006: 16)

In sum, in order to provide a correct interpretation of null and overt subjects occurring in bi-clausal sentences, language-universal (Accessibility Theory) and language-specific parsing (PAS) strategies need to converge. Very often, the two processes are dissimilar in the two languages involved. As a consequence, it becomes quite difficult for L2 learners to integrate multiple sources of information in a consistent manner, determining the semantic fallacies noticed in the data.

As we have seen, current L2 research on null or overt subjects has provided different accounts of why bilingual and advanced grammars still show a non-native distribution and interpretation of these arguments. Some researchers attribute these discrepancies to a deficit of learners' pragmatic knowledge, others to their lack of the required processing resources.

In light of these discordant analyses of why Spanish pronouns are acquired so late, the present study wishes to provide a much clearer and more articulate explanation of this delay; ultimately, advancing some hypotheses on whether a native-like production of these arguments can be finally attained. To that end, the use of Spanish null and overt subject pronouns by adult English speakers has been analyzed. The choice of this particular language group and the selection of this specific aspect of Spanish grammar are justified on the following grounds:

1. English and Spanish grammars are strikingly different with regard to the syntactic and discursive properties of their external arguments. As we have seen, Spanish, being an inflectionally rich language, allows the presence of null pronouns in both matrix and subordinate clauses. Extraction of a subject in the form of a *wh*-phrase from the embedded clause and subject-verb inversion in presentational contexts are also permitted. In English, these constructions are ungrammatical due to the inability of this language to license null elements. Furthermore, at the pragmatic level, Spanish grammar utilizes a particular SV word order to account for the pragmatic features of Focus and Topic, whereas English marks the focal part of the sentence prosodically. The two languages also differ on how the semantic dependencies between

subjects and their antecedents are established. As previously indicated, specific processing strategies are used to determine a felicitous correlation, which is usually guided by the degree of prominence and accessibility of the two elements involved. Although the two languages share a similar ranking, they do not exhibit exactly the same set of referring expressions. Furthermore, in Spanish, the different degrees of prominence and saliency are syntactically encoded. In English, on the contrary, the co-reference between an anaphor and its antecedent is determined by the structural distance between the two discourse entities.

2. Previous L2 studies on the acquisition of Spanish subjects (Hertel, 2003; Lozano, 2003, 2006a, b; Pérez-Leroux et al., 1997, 1999; Montrul, 2004; Montrul & Louro, 2006, among others) have mostly investigated whether the morpho-syntactic properties and the discursive-pragmatic features of Spanish subjects are acquired simultaneously, or follow distinct developmental patterns. To my knowledge, there is no L2 investigation that has specifically examined whether the acquisition delay of these features results from an underlying deficit on learners' part, or the excessive processing demand they entail.

In sum, by taking a closer look at how English speakers deal with the use of Spanish lexical subjects in focused settings and the selection/interpretation of intra-sentential null or pronominal arguments, we may shed some clearer light on the still unresolved developmental question of whether learners' non-native performance with these referential expressions is a representational or psychological problem.

With that in mind, the discussion that follows proposes possible acquisition scenarios that can be gathered from the data, and what they may suggest regarding the nature of this acquisition delay. In addition, the results obtained will be interpreted by paying special attention to the different syntactic status of VS structures featuring transitive and other types verbs in order to more clearly define the representational nature of the problem, if any. Similarly, test-items featuring complex sentences will be intentionally ambiguous so that

learners' interpretative choice of overt and null anaphors will be a strong indication of whether the required L2 pragmatic expertise has been attained. Finally, a developmental pattern will be outlined based on learners' performance, and stronger hypotheses regarding the typology of their acquisition deficit will be advanced.

## 2. Predictions

In light of the syntactic and semantic-pragmatic differences between the two languages, what predictions can be made regarding this unresolved acquisition problem?

Empirical data should help us provide an adequate classification. For instance, if L2 learners sporadically use postverbal lexical subjects in focused structures, along with an erroneous selection of antecedents of the anaphoric expressions, we could claim that they are unaware of the fact that the discursive features involving these arguments are syntactically determined. In other words, their preference for the awkward SV word order and their infelicitous referential correlations may derive from a lack of the required pragmatic expertise. This deficiency, however, would not reflect a total breakdown of learners' grammatical system, since it would be limited to this particular linguistic component. Recall, null subject pronouns occurring in declarative clauses are usually used in a native-like manner very early on. This acquisition scenario has even been taken to strongly support some form of Continuity in adult Second Language Acquisition (SLA), given that null elements have been fully acquired in adult age, despite their absence in learners' L1 grammar (consistent with *Full Access Hypothesis*, henceforth: FAH, Epstein, Flynn & Martoharjodono, 1996, among others). In view of these results, the variability observed in advanced L2 grammars should not be attributed to learners' limited access to their universal linguistic knowledge, but rather to their incomplete knowledge of the L2 pragmatic system.

If that is indeed the case, cross-linguistic influence cannot be totally excluded, even at such high proficiency levels. If data report an excessive production of preverbal lexical subjects in focused contexts along with frequent interpretations of overt anaphors as

erroneously co-referring with the subject of the matrix clause, one could claim the presence of visible L1 effects in their L2 grammars. As previously mentioned, in English the discursive traits of focus and prominence are not syntactically encoded. These pragmatic features are usually provided through intonation. Such results, however, would not totally support FT/FAH since L1 transfer would only impact the pragmatic component of their interlanguage, and not the entire linguistic system.

A third scenario could be that this variability is mostly noticed in the selection and interpretation of intrasentential pronominal subjects. In other words, English learners of Spanish seem to be aware that focused arguments must appear in sentence-final position. However, they are insensitive to the fact that the correct subject-antecedent correlations of their target language are guided by syntactically encoded parsing strategies. As a result, their semantic inconsistencies could not be attributed to an underdeveloped pragmatic expertise; otherwise, a non-native performance would have been noticed in both types of constructions. Most likely, they derive from learners' incapability to deal with the demanding processing task. As we have seen, the use of Spanish pronouns in these contexts entails the use of different cognitive mechanisms and parsing strategies that could become a huge acquisition undertaking.

In sum, the present study should provide sufficient evidence that would more clearly demonstrate whether the acquisition delay of the discursive features of Spanish subjects derives from a representational or cognitive impairment. It could also indicate whether this deficit will be eventually overcome.

### **3. The experiment**

#### *3.1 Subjects*

A total of twenty-eight subjects participated in the experiment. They were adult native English speakers studying Spanish in various New York City colleges. Their age ranged between 18 to 65 years.

They were all advanced learners of Spanish who were born and educated in USA. They had successfully completed advanced level Spanish courses, and were about to attain an undergraduate degree in Spanish language and literature. Some of them were even pursuing a graduate degree in Spanish or bilingual education. In most cases, they had been raised in a household where Spanish was the dominant language. They had been actively using this language since birth, especially with family members, relatives, and friends.

Fifteen monolingual Spanish speakers served as a control group. They were all highly educated with graduate degrees obtained either in their native country or USA. They ranged in age from 25 to 55 years old, and were mostly from South America, and a few from Spain.

### 3.2 Material

The test instrument used was a Contextualized Acceptability Judgment Task (CAJT). This type of experiment had already been adopted in Lozano (2006a), which also tested the L2 use of Spanish lexical subjects in focused contexts. Informants read a series of brief stories followed by a comprehension question. The inquiries were in the form of *¿Qué pasó* 'What happened?' or *¿Quién vino?* 'Who came?' and were followed by two answers whose only structural difference was the pre- or postverbal position of their subject. Although both replies were grammatical, the context would be crucially biased for only one pragmatically acceptable answer, namely the one displaying a VS word sequence. In fact, they were all 'out-of-the blue' questions, and required the interlocutor to provide information previously unknown to the speaker. As indicated earlier, in these particular situations the presentationally focused element (i.e. the subject), usually appears at the end of the sentence. In (12) below, for instance, the correct answer would be (12a) since the question asked is a global one.

- (12) Jorge enters the kitchen, and, to his surprise, finds a lot of empty bottles on the kitchen table. He asks his roommate, Rodrigo:  
       ¿Quién se tomó toda esta cerveza?



- Rodrigo answers, a. Se la tomaron Luis y Armando. 0 +1 +2  
 b. Luis y Armando se la tomaron. 0 +1 +2

[Translation of the Spanish sentences]

'Who drank all the beer?

- Rodrigo answers: a. Drank it Luis and Armando.  
 b. Luis and Armando drank it.

Replies were graded on a 2-point scale to indicate different degrees of acceptability, where 0 meant that both answers are equally acceptable, +1 almost acceptable, and +2 completely acceptable. Such a scaling was necessary, because, as previously mentioned, incorrect word order does not determine ungrammaticality, but only pragmatic awkwardness, whose level is subjective in nature.

Informants were presented with twelve situations involving three different categories of verbs, namely transitive, unergative, and unaccusative (four tokens for each verb class). The choice of testing the use of subjects with these three distinct verb classes was based on the fact that their external arguments are underlying different, and such distinctiveness may impact the acquisition of their pragmatic features. In general, subjects of transitive verbs like *tomar* 'to drink', or intransitive/unergative verbs such as *llorar* 'to cry' are interpreted as being the active agents. Syntactically, they are base-generated in their canonical position, [Spec-VP]. They then raise to [Spec-TP] to check their case-features (see, Burzio, 1986, for a more detailed explanation). On the contrary, subjects of intransitive/unaccusative verbs like *llegar* 'to arrive' are not perceived as being the semantic agents in that they do not initiate any action of the verb. They play more the role of patients, even though they are not assigned accusative case. For this reason, they are usually base-generated in object position, and, subsequently, move to their final site for case-checking purposes. Despite their subjects share a common postverbal placement in focused contexts, it is worth investigating whether their underlying syntactic differences are reflected in the acquisition of their pragmatic properties in order to provide additional evidence for a representational or cognitive account of their acquisition delay.

Each situation was presented one at the time, and participants were instructed to check off the first response that came to mind. After having read each story, they were given only 20 seconds to respond. This restriction was necessary to prevent informants from referring back to their metalinguistic knowledge rather than basing themselves solely on their initial intuitions.

Subjects were also administered a Self-Paced Reading Task (SPRT). This experiment followed the same methodology as in Carminati (2002) and Filiaci, Sorace & Carreiras (2013). Similar to those L2 studies, it has investigated whether speakers of a non-Pro-Drop language (English) are able to identify the correct antecedents of null and overt subject pronouns of a Pro-Drop language (Spanish). The study consisted of a series of sixteen sentences featuring a subordinate clause followed by a matrix sentence containing a null (13) or overt subject (14). Contrary to the previously mentioned experiments, the initial semantic ambiguity would not be totally resolved by the plausibility of the sentence. Test-items were purposely left slightly unclear with regard to who the referents of the subject pronouns might be. This way, learners would be forced to rely solely on their acquired pragmatic competence of the target language and the use of the required processing strategies, and not their understanding of the world. This way, their responses would more clearly indicate whether this expertise had been attained.

Cuando Eva y Carlota vieron a sus hermanas después de  
mucho tiempo,  
When Eva<sub>j</sub> and Carlota<sub>j</sub> see-PAST to their sisters after of  
much time

se pusieron a llorar.  
[pro<sub>i/j</sub>] themselves put-PAST to cry  
'When Eva<sub>j</sub> Carlota<sub>j</sub> saw their sisters<sub>i</sub> after such a long time, they  
started to cry.'

Cada vez que Carla discute con su madre, ella se pone  
muy triste.  
Every time that Carla<sub>i</sub> argue-PRES with her mother<sub>j</sub>, she<sub>i/j</sub> herself  
puts very sad  
'Every time Carla argues with her mother, she becomes sad.'

Each sentence appeared on a computer screen one at the time by pressing the space bar on the keyboard. After the sentence was read, a comprehension question followed by two possible answers would be shown on the computer screen by pressing the space bar a second time. Each question was in the form of *¿Quién/Quiénes....?* 'Who' asking who the author of the action described in the matrix sentence was. The replies, on the other hand, presented the two possible referential choices indicated in the subordinate clause. For instance, in (14) above, the person who became sad, expressed by the subject pronoun *ella* 'she', could be either *Carla* or *su madre* 'her mother'. Participants were instructed to choose the answer they thought to be the more plausible one by pressing the "F" key on the keyboard for the option appearing on the left of the screen, and the "J" key for the option located on the right side.

Furthermore, prior to the administration of the test, subjects were trained on the modalities of the experiment by completing a practice session. Once the answer was selected, either in the practice and regular section of the experiment, subjects were not allowed to go back to the previously read sentences. Test-items would be, in fact, projected on the computer screen for only 20 seconds. After the allotted time, they would disappear. This was necessary to prevent informants from referring back to their metalinguistic knowledge so that data would more closely reflect their initial reaction, and not the one they have reconsidered and edited.

All responses were recorded and timed by the computer. Calculating learners' reaction time was an important piece of information to obtain. It would help us find out whether there were some differences between the two types of pronouns in identifying their appropriate co-referents, showing whether their intrinsic syntactic and pragmatic distinctiveness is reflected in their processing time.

#### 4. Results

As previously mentioned, this study was set up to investigate whether the expected late mastering of the discursive features displayed by Spanish subjects is due to an underlying pragmatic impairment or the cognitive and processing demand they entail. To that end, advanced

Spanish learners' use of these external arguments in presentational contexts and bi-clausal sentences was analyzed. Their performance was evaluated by measuring their level of preference for responses displaying the VS word order, and their degree of accuracy in identifying the antecedents of null or pronominal anaphoric expressions.

With regard to the first experiment (CAJT), L2 learners' performance was graded as follows. If they deemed the answer with a VS order to be completely acceptable, they would be assigned one point under the VS category. If they indicated that particular word order to be almost acceptable, they would receive half a point. In the case they showed that both answers were similarly acceptable, they would score only a quarter of a point. If they selected the reply with a preverbal position of the subject, a similar grading system was used. Points, however, would be assigned to the SV category.

In the SPRT, on the other hand, responses to target sentences were coded as "correct" or "incorrect", based on whether the appropriate referent of the subject of the matrix clause had been identified. For each correct answer, L2 learners were assigned one point, whereas no points were provided for any incorrect choice.

Furthermore, the experimental group's performance in each task was compared to that of Spanish controls in order to more clearly lay out the findings related to the acquisition issues investigated.

#### *4.1 VS word order*

CAJT specifically investigated whether advanced learners of Spanish had developed the required pragmatic knowledge to account for the postverbal placement of lexical subjects in focused contexts. To that end, informants and Spanish native speakers' preference means for VS and VS word orders were calculated following the scoring system described above.

Final results have shown that the experimental group preferred the responses featuring a VS sequence at a rate of 48.6 per cent, Replies with the inverted word order were chosen at a rate of 37.1 per cent. The control group, on the other hand, was more clearly prone to indicating the VS word sequence as their preferred option. Responses displaying such a word order

were selected at a rate of 71.1 per cent, as opposed to the 20.9 per cent rate of the other type of replies. This is summarized in Table 1 below.

**Table 1.** *Preference rates of the two response-types to target sentences provided by the experimental and control groups*

Participants	Word order	
	VS	SV
EXP (k = 336)	48.6	36.1
NT (k = 180)	71.1	20.9

EXP = experimental group

NT = control group

k = total number of observations

As we can see, L2 learners and Spanish native speakers behaved quite similar in terms of their preference. They both selected the responses displaying a VS order at a higher rate than those featuring the opposite pattern. Within-group comparisons of their data have revealed that these differences were also statistically significant in both participant-based (EXP:  $F_1(1, 27) = 11.2664$ ,  $p = 0.008$ ; NT:  $F_1(1, 14) = 139.04$ ,  $p < 0.001$ ) and item-based analyses (EXP:  $F_2(1, 10) = 3.8563$ ,

$p < 0.001$ ; NT:  $F_2(1, 10) = 8.0586$ ,  $p < 0.001$ ).

In any event, despite these similarities, the two groups were quite distinct regarding their degrees of preference. A 2 (group)  $\times$  2 (word order) ANOVA has reported a main effect of Group ( $F_1(1, 41) = 44.922$ ,  $p < 0.001$ ;  $F_2(1, 10) = 5.095$ ,  $p < 0.001$ ), indicating that Spanish learners were, in general, much less accurate than the controls. Such discrepancies were equally noticed in either type of response, where they even reached statistical significance (VS:  $F_1(1, 41) = 29.8095$ ,  $p < 0.001$ ;  $F_2(1, 10) = 4.2194$ ,  $p < 0.001$ ) (SV:  $F_1(1, 41) = 17.6698$ ,  $p < 0.001$ ;  $F_2(1, 10) = 3.7852$ ,  $p < 0.001$ ).

From an acquisition perspective, this pattern of results indicates that L2 learners seem to be aware of the fact that a lexical subject needs to be inverted in presentational contexts. However, they are not

yet completely insensitive to the pragmatic oddness of the responses featuring the canonical SV sequence. As such, they have not yet reached a full mastery of the discursive features of Spanish subjects, even though they seem to be moving into the right direction.

As previously indicated, the experiment also included different categories of verbs, i.e. transitive, unergative, and unaccusative, to see whether their underlying syntactic distinctiveness has an impact on the acquisition of the pragmatic traits of their subjects. To that purpose, the preference rates for either word order (VS/SV) containing each verb-type was calculated. Results are shown in Tables 2 and 3 below.

**Table 2.** *Preference rates of VS responses to target sentences featuring transitive, unergative, or unaccusative verbs provided by the experimental and control groups*

Participants	Verb-types		
	TR	UNERG	UNACC
EXP (k = 112)	39.6	44.1	60.3
NT (k = 60)	69.9	64.4	77.5

TR = transitive UNERG = unergative UNACC = unaccusative  
k = total number of observations for each verb-type

**Table 3.** *Preference rates of SV responses to target sentences featuring transitive, unergative, or unaccusative verbs provided by the experimental and control groups*

Participants	Verb-types		
	TR	UNERG	UNACC
EXP (k = 112)	48.4	40.5	23.4
NT (k = 60)	20.4	26.6	15.4

TR = transitive UNERG = unergative UNACC = unaccusative  
k = total number of observations for each verb-type

As we can see in Table 2, VS responses featuring unaccusative verbs were selected at a higher rate than those containing transitive or unergative verbs. A comparison of the three means has revealed that these discrepancies were also statistically significant ( $F(2, 27) = 6.6943$ ,  $p < 0.001$ ). Such a preferential pattern is also displayed by the SV replies. Responses with unaccusative verbs were chosen at a statistically significant lower rate than their transitive and unergative counterparts

( $F(2, 27) = 10.1502$ ,  $p < 0.001$ ), suggesting that the underlying lexical-syntactic dissimilarities of these verbs do influence the acquisition of the pragmatic features of their external arguments. The control group, in fact, did not seem to be sensitive to the nature of the verbs involved. No visible differences in preference for a particular verb-class were noticed. The discrepancies were irrelevant and did not reach any statistical significance in either category of responses (VS:  $F(2, 14) = 1.4545$ ,  $p > 1$ ) (SV:  $F(2, 12) = 1.3202$ ,  $p > 1$ ).

#### 4.2 *Lexical vs. null subjects*

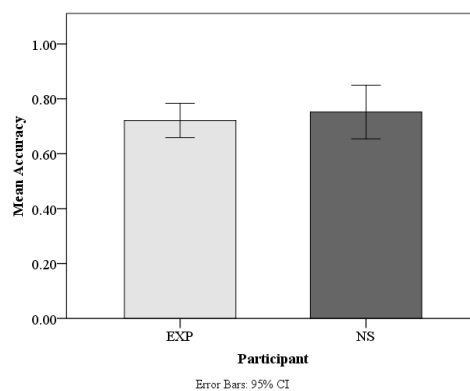
The second experiment (SPRT) was conducted to see whether L2 learners were able to deal with the intense processing demand that the semantic interpretation of Spanish anaphoric expressions require. For that purpose, the two groups' accuracy levels in identifying the antecedents of the matrix external arguments were calculated. Before proceeding with the analysis of the data, a cut-off rate was established based on subjects' performance on the fillers/distractors. This was necessary in order to determine the reliability of participants' responses. More specifically, scores from subjects with an overall accuracy rate of less than 35 per cent and controls with less than 65 percent with the filler items were excluded from the statistical analyses performed. All participants, however, were quite precise with these stimuli whose accuracy rates were well-above 90 percent (see Table 4 below). Therefore, no data from any subjects were eliminated.

**Table 4.** Mean response accuracy of experimental and filler items

Participants	Stimuli	
	Experimental items	Filler items
EXP (k = 448)	72.1	96
NT (k = 240)	75.2	97

k = total number of observations for each verb-type

Table 4 also reports the results of subjects' general performance with the test-items. As we can see, both groups reached high degrees of accuracy (EXP: 72.1%; NT: 75.2%) in their responses. Interestingly, a mixed two-way ANOVA (subject-type by group) has also indicated that there was no main effect of Group in both subject-based ( $F_1(1, 41) = 0.78, p = 0.383$ ) and item-based analyses ( $F_2(1, 14) = 0.761, p = 0.398$ ). In other words, both experimental subjects and controls selected the correct antecedents of matrix subjects with similar accuracy, showing that L2 learners do not appear to encounter greater difficulties than natives in doing so (as illustrated in Figure 1 below).

**Figure 1.** Mean proportion of responses for both null and overt subject pronouns provided by the experimental and control groups



In addition, the two groups have displayed a congruent behavior in the semantic interpretation of the two subject-forms considered separately. The statistical analysis of their means has not reported any significant interaction between Subject-Type and Group ( $F_1(1, 41) = 0.809, p = 0.374$ ;  $F_2(1, 14) = 1.366, p = 0.262$ ), indicating that there were no relevant dissimilarities in accuracy levels between learners and natives in their selection of the co-referents for either type of anaphoric expression (see Table 5 below).

**Table 5.** Accuracy rates in selecting the antecedent for lexical and null anaphors provided by the experimental and control groups (SD in parenthesis)

Subject-type	Participants	
	EXP	NS
Lexical (k = 224)	58% (0.23)	57% (0.25)
Null (k = 120)	86% (0.14)	94% (0.09)

k = total number of observations for each verb-type

Both groups were much less correct in identifying the antecedent of an overt pronoun than a null pronominal form. As we can see, the accuracy rates of their responses involving a lexical subject were both in the high fifties, whereas those replies including a null argument reached 86 per cent and 94 per cent for the experimental subjects and natives, respectively. These discrepancies were also quite significant from a statistical point of view ( $F_1(1, 41) = 42.55, p < 0.01$ ;  $F_2(1, 14) = 10.708, p < 0.01$ ), suggesting the two groups' judgments were similarly affected by the form of the subject involved.

In addition to calculating learners and natives' accuracy rates, we measured the response time to each target sentence. As indicated in the *Material* section, this was necessary because determining the response time (RT) could be a good indication of the level and type of difficulty participants encounter in the resolution of the anaphora. Before proceeding with the analysis, a trimming on each participant's

data was performed. More specifically, RTs of trials classified as incorrect were removed. Therefore, only RTs of 'correct' trials were used in the statistical analysis. In addition, a standard deviation-based trimming on each individual subject's TRs was also conducted. For each participant, RTs that fell above/below 2 standard deviations from his/her mean were replaced by the cutoff value  $M+2SD$  or  $M-2SD$ . This procedure was adopted because reaction times are subjective. Some people tend to read texts more slowly or faster than others. In any case, no RTs lower than 2SD below the mean were found, whereas there was a small percentage of RTs above 2SD of the mean (4%) that needed to be substituted with the cutoff value. The mean RTs for experimental and control groups are illustrated in Table 6 below.

**Table 6.** Summary of raw RTs by conditions (RTs in millisecond)

Subject type	Group	Mean	SD	N
Lexical	EXP	10111.21	6904.09	28
	NS	7880.67	3094.39	15
Null	EXP	8839.35	5620.78	28
	NS	5775.55	1559.60	15

The ANOVA performed on the data has not reported any main effect of Group in either subject-based and item-based analysis ( $F_1(1, 41) = 0.539$ ,  $p = 0.467$ ;  $F_2(1, 14) = 2.758$ ,  $p = 0.119$ ). Although native speakers' responses to comprehension questions were numerically faster ( $M = 6828.11$ ) than those of the experimental participants ( $M = 9475.28$ ), their RT differences were not statistically significant.

In any event, a significant main effect of Subject-type was found in the subject-based analysis ( $F_1(1, 41) = 9.150$ ,

$p = 0.004$ ), and marginal in the item-based analysis ( $F_2(1, 14) = 3.926$ ,  $p = 0.068$ ), indicating that both groups reacted similarly to the two types of anaphora, being significantly faster when the subject involved was null ( $M = 7307.47$ ) than when it was overt ( $M = 8995.94$ ). Such an assumption is further corroborated by the fact that the statistical analysis has not

shown a relevant interaction between Group and Subject-type, at least in the subject-based analysis: ( $F_1(1, 41) = 0.963, p = 0.332$ ;

( $F_2(1, 14) = 5.271, p = 0.038$ ).

Additional within-group comparisons, however, have revealed that these similarities are not so straightforward. Only the controls responded significantly faster to questions involving a null subject than to those displaying a lexical pronoun

( $t_1(14) = 2.2240, p = 0.0042$ ;  $t_2(7) = 5.049, p = 0.001$ ). The experimental participants reacted with similar speed regardless of whether the target sentence contained a lexical or null subject ( $t_1(27) = 1.842, p = 0.076$ ;  $t_2(7) = 0.893, p = 0.402$ ).

## 5. Discussion

The main purpose of this study was to determine whether the acquisition delay of the discursive properties displayed by Spanish null and overt subjects is due to an underlying pragmatic deficit on learners' part, or is the result of their inability to process multiple forms of information. In general, results have reported a similar late mastery of these features as in previous L2 research (Pérez-Leroux et al., 1997, 1999; Montrul, 2004; Montrul et al. 2006,

Lozano, 2006a, b). Our learners, in fact, have shown not to have a full control of Spanish subject pronouns, despite their high proficiency levels. As we have seen, their preference for postverbal subjects in presentational contexts was much lower than that of Spanish controls. Nonetheless, unlike the L2 studies previously cited, there is a strong indication in the data that they are clearly moving toward a native-like competence. Their degree of preference for the SV word order is much less noticeable than in those studies, showing a quite manifest predilection for the opposite word sequence.

Furthermore, in contrast with Hertel (2003) and Timpson et al. (2004), our L2 learners do not seem to completely rely on their L1. Their preference for responses displaying preverbal lexical subjects is less visible than it would be if their L1 grammar had played a more incisive role in their decision. Learners would have selected the replies with a SV

sequence much more frequently given that their native language recurs to a prosodic device (intonation) to have a similar topicalization effect.

Contrary to Montrul (2004), the lexical-syntactic nature of the verbs involved does have an impact on the use of their focused subjects. As we have seen, responses displaying unaccusative verbs and a VS word order were selected at a higher rate than the ones featuring the other two verb-types. It appears that the syntactic similarity between the base-generated position of their subjects and their postverbal placement in focused contexts may have determined such a preferential bias leading to their target-like production. Such results clearly highlight the multifaceted nature of this phenomenon which involves different linguistic components. Therefore, the delayed acquisition of its features should derive from a deficiency on learners' part, which is more representational than cognitive.

Regarding the selection of the co-referents for intrasentential null or overt subjects, data have not reported any visible discrepancies between L2 learners and Spanish natives. Both groups were able to identify the correct antecedent of Spanish anaphoric expressions with analogous levels of accuracy and at a comparable speed. From an acquisition perspective, such similar outcomes indicate the cognitive and psychological burden this process entails does not create any additional difficulties for our L2 learners. The mechanisms and the parsing strategies involved in identification of the correct antecedents of Spanish subject pronouns are fully operational, and their effectiveness does not seem to be impacted by learners' incomplete knowledge of their target language.

This assumption is further corroborated by the two groups' congruent pattern of results regarding the null and overt anaphors considered separately. L2 learners as well as Spanish controls were more accurate in identifying the appropriate antecedents of null pronouns than those of lexical subjects. Such outcomes, however, are partially consistent with those of previous L2 studies (see, Paradis and Navarro, 2003; Montrul, 2004, among others), where these dissimilarities were only reported in learners' data. Natives, in fact, did not display any discrepancies in accuracy in interpreting the two

types of anaphoric expressions. Learners' distinct behavior was attributed to possible cross-linguistic influence for several reasons. First of all Spanish lexical subjects are more ambiguous and, hence, more complicated to process than null pronouns because of their apparent similarity with their English counterparts. Secondly, L1 transfer is usually unidirectional, and occurs when the native pronominal system is constrained by fewer pragmatic norms than that of the target language (see, Sorace et al., 2004). As we have seen, the distribution and interpretation of English pronouns are, indeed, less complicated than that of their Spanish counterparts from a morpho-syntactic and pragmatic perspective.

However, the two groups' similar behaviors reported in this study do not seem to support this hypothesis. If English grammar had played a significant role, data would have reported two strikingly different developmental patterns. Natives, contrary to L2 learners, would have been more consistent and equally accurate in identifying the antecedents of null and overt pronouns. Since results show otherwise, the discrepancies in accuracy involving the two pronominal forms may have been determined by their intrinsically different nature. According to Cardinaletti and Starke (1999), the Spanish subject pronouns *él* 'he' or *ella* 'she', are structurally deficient elements that, syntactically, can be associated more with weak pronominal forms than authentic strong elements, as the Italian subject pronouns, *lui* and *lei*, would be. As such, they are less sensitive to the syntactically encoded determinants of prominence and the constraints of the parsing strategy (PAS) than their Italian counterparts. For this reason, they are allowed to freely co-refer with more or less prominent referential expressions depending on the meaning of the sentence. This referential ambiguity is an inherent discursive trait of the lexical pronouns, not shared with their null counterparts, and equally affects any type of speaker, native or L2 learner.

## 6. Conclusion

The data gathered from the two experiments clearly indicate that the late acquisition of the discursive features of Spanish subjects in L2

settings does not derive from learners' inability to deal with the cognitively demanding task, but it results from their incomplete pragmatic knowledge of the target language. Participants have shown, in fact, to be able to coordinate different types of information and to activate the appropriate parsing strategies. However, some performance difficulties have been noticed when they needed to account for the occurrence of lexical subjects in focused contexts. As we have seen, the postverbal placement of these syntactic elements requires the use of different types of linguistic competence that ranges from syntax to pragmatics. Our learners do not seem to have fully attained such an expertise. They are unaware of the uninterpretable strong feature of the Spanish functional focus head, and do not have a complete familiarity with the syntactically encoded pragmatic norms that regulate the use of these subjects. That being the case, the delayed mastery of the discursive features of Spanish subjects is to be attributed to an underlying deficit on learners' part, which is representational rather than cognitive in nature. Interestingly, such a deficiency appears to be only temporary, and to be gradually overcome, since learners have shown clear signs of moving toward a native-like performance.

Future L2 research could further evaluate this idea by analyzing the performance of different language groups, especially those speaking other pro-drop languages.

### *6.1 Pedagogical implications*

Data have shown that advanced Spanish L2 learners have a lot of difficulties in correctly placing the Spanish subjects when they occur in focused contexts. Unfortunately, this is an acquisition scenario common among L2 learners acquiring other pro-drop languages, such as Italian, Greek, and others. Our findings, however, have indicated that these problems derive from an underdeveloped pragmatic expertise of their L2, partly due to an educational deficiency. As indicated in the Introduction section, students receive null or minimal formal instruction on the interpretation and distribution of Spanish subjects. One way that could help overcome such a teaching deficit and facilitate their learning

process is to make the input salient to L2 learners. This can be done by stressing or highlighting the relevant aspects of the input regarding the use of Spanish external arguments. For instance, various teaching tools or activities could be used to draw learners' attention to their different positions. In addition, more detailed explanations and more extensive practice should be allowed when dealing with their discursive features and their postverbal placement in focused contexts. This could be a very effective way to reduce the acquisition delay noticed in the study.

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