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PRAGMATIC SOLUTIONS FOR SYNTACTIC PROBLEMS
**UNDERSTANDING SOME L2 SYNTACTIC ERRORS IN TERMS OF DISCOURSE-
PRAGMATIC DEFICITS ***

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Contemporary research in generative second language (L2) acquisition has attempted to address observable target-deviant aspects of L2 grammars within a UG-continuity framework (e.g. Lardiere 2000; Schwartz 2003; Sprouse 2004; Prévost & White 1999, 2000). With the aforementioned in mind, the independence of pragmatic and syntactic development, independently observed elsewhere (e.g. Grodzinsky & Reinhart 1993; Lust et al. 1986; Pacheco & Flynn 2005; Serratrice, Sorace & Paoli 2004), becomes particularly interesting. In what follows, I examine the resetting of the Null-Subject Parameter (NSP) for English learners of L2 Spanish. I argue that insensitivity to associated discourse-pragmatic constraints on the discursive distribution of overt/null subjects accounts for what appear to be particular errors as a result of syntactic deficits. It is demonstrated that despite target-deviant performance, the majority must have native-like syntactic competence given their knowledge of the Overt Pronoun Constraint (Montalbetti 1984), a principle associated with the Spanish-type setting of the NSP.

1. *Introduction*

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Mere observation highlights the fact that the majority of adult L2 grammars diverge from target native grammars, and to varying degrees. Notwithstanding apparent L1/L2 differences, available empirical data suggest that these same L2 grammars contain knowledge of L2 properties that are underdetermined in the input, not transferable from the L1 and not explicitly taught; the so-called *logical problem of L2 acquisition* (Gregg 1996 and White 2003). With the aforementioned in mind, contemporary research in the generative study of L2 acquisition has attempted to account for particular manifestations of target-deviancy in L2 performance in accord with theoretical models of adult UG-continuity (e.g., Goad et al. 2003; Lardiere 1998 a&b, 2000; Prévost & White 1999, 2000; Schwartz 2003; Sprouse 2004; White 1989, 2003; Sorace 2000, 2003). The present study aims to add to such explanations by exploring the ensuing effects in L2 performance of the independent development of pragmatics and syntax. This notion stems from analyses of several language acquisition studies, which highlight the independence of pragmatic and syntactic development in general (e.g., Avrutin & Wexler 1992; Flynn 1987; Grodzinsky & Reinhart 1993; Lust et al. 1986; Schaeffer 2000; Serraticce, Sorace & Paoli 2004) and in particular discuss the syntax-before-discourse observation in L2 acquisition (e.g., Montrul, 2004; Montrul & Rodríguez-Louro, 2004; Pachecho & Flynn, 2005; Pérez-Leroux et al., 1999; Sorace, 2000, 2003, 2004; Tsimpli et al., in press). If indeed pragmatic competence emerges later than syntax, it follows that deficits in pragmatic knowledge can manifest as what appear to be particular syntactic errors in performance. As a result, particular errors in L2 interlanguage (IL) development, thought to occur for reasons of syntactic deficits, are perhaps better understood and most accurately accounted for in terms of deficiencies in discourse-pragmatic knowledge.

Framed within the syntax-before-discourse observation, the current study explores the possibility that L2 syntactic competence can be native-like despite errors that surface as a result of a vulnerable syntax-pragmatics interface. This is tested by examining the possible resetting of the Null-Subject Parameter (NSP) from the English to the Spanish value assuming a Minimalist Program (MP) feature checking model analysis for null-subject licensing (Alexiadou & Anagnostopoulou 1998). Accordingly, the research questions for the present study are the following:

- a) Do English L2 learners of Spanish acquire the [+D, + interpretable] ϕ -features associated with Spanish verbal agreement morphology enabling them to check a universally strong EPP-feature via V-raising alone?

- b) Do English L2 learners of Spanish acquire at the same time the associated discourse pragmatic conditions, which regulate the distribution of overt/null subjects in discourse? If not, how does this affect L2 syntactic performance?

This article is structured as follows: in sections 2 and 3, the theoretical background is presented. In section 4, L2 studies examining the resetting of the NSP are briefly reviewed. Finally, from section 5 onward, the present empirical study is presented. I argue that an L2 insensitivity to Spanish discursive constraints accounts for target-deviant uses of null and overt subject pronouns by English learners of L2 Spanish. In spite of this L1/L2 disparity, these same L2 learners demonstrate clear sensitivity to the syntactic constraints that regulate subject pronoun distribution in Spanish, which is ultimately determined by their native-like knowledge of the Overt Pronoun Constraint (OPC) (Montalbetti 1984), a [+ null-subject] derived principle.

2. *The Null Subject Parameter (NSP)*

Since its original formation, the NSP (Jaeggli, 1982; Rizzi, 1982, 1986) has been reanalyzed on several occasions (*e.g.*, Huang 1984; Jaeggli & Safir 1989; Safir 1985 among others) in an effort to account for null-subjects of Chinese-type languages as well as the controversial nature of determining exactly which syntactic properties, if any, derive from this parameter.¹ In recent years, the Minimalist Program (MP) (Chomsky 1995, 2000, 2001) has made advances in explaining *pro-drop* phenomena from a feature checking model approach. The theory I will advance herein is that of Alexiadou & Anagnostopoulou (1998), (henceforth A&A). In essence, A&A propose that Spanish verbal agreement morphology includes a nominal element [+ D, + interpretable ϕ -features]. In other words, the verbal inflectional affixes of Spanish, as in (1a) are thought to share the identical status of English pronouns as in (1b).

- | | | | | | | | | |
|-----|----|---------------|-----------------|----|------------|-------|------------|-------|
| (1) | a. | <i>beb-o</i> | <i>beb-emos</i> | b. | I | drink | we | drink |
| | | <i>beb-es</i> | <i>beb-éis</i> | | you | drink | you | drink |

¹ Studies of typologically wide samplings of languages provide counter evidence to the so-called NSP clustering properties. For example, some Caribbean dialects of Spanish and Old French allow(ed) overt expletives despite being *pro-drop* languages (Arteaga 1984; Toribio 1994). Conversely, some non-null subject languages such as Yiddish and German allow null expletive subjects (Safir 1985). In the same vein, earlier work on subject and non-subject asymmetries in the relativization of embedded NPs suggested that the connection between extraction of subjects and null subjects ought to be redefined (Auwera 1984). Moreover, whereas some languages with empty subjects in finite clauses allow subject placement at the right end of the clause (Adams 1987; Grewendorf 1986), other languages allow subjects at the right end of the clause, but disallow empty subjects (Müller & Rohrbacher 1989).

beb-e *beb-en* **she** drinks **they** drink

As per A&A, “EPP-checking is D-feature checking in a non-substantive category by a [nominal] lexical category (1998:157)”. In Spanish, head-to head movement of the verb to AgrSP is able to check the EPP-feature since the agreement morpheme of the inflected verb is able to check the D-feature of AgrSP and to meet the identification requirement. Conversely, languages such as English, with ‘weak’ verbal morphology, have [- D, - interpretable] agreement features. As a result, in English-type languages, checking the universally strong EPP-feature² cannot occur without an overt subject pronoun merged to the Spec of AgrSP.

Within the MP, it is assumed that much of the burden of language acquisition, for children and arguably adults alike, is shifted to the learning of the lexicon; the learning of morphosyntactic features from the target language. Under minimalist assumptions, the computational processes of Move and Merge are purported to be universal. Therefore, language-to-language variability is likened to the existence of variable morphological properties. Assuming a universally strong EPP-feature, null subject parametric differences manifest in terms of how different languages check this feature. In languages like Spanish, X-movement enables the checking of the EPP-feature, and thus null-subjects are possible as compared to languages like English where XP-merge is required for the same checking, and thus necessitates overt subject pronouns. English learners of L2 Spanish, therefore, must acquire the relevant nominal features of Spanish agreement to be able to license null subjects in the same way as native Spanish speakers.

3. *Constraints on Overt Subject Pronouns in Spanish*

In Spanish and related languages (e.g. Catalan and Italian), null/overt subject distribution has been well documented, inclusive of the discursive conditions that permit and require the use of overt subject pronouns in these languages (e.g., Fernández-Soriano 1989, 1993; Luján 1987, 1999; Picallo 1994, 1998; Rigau 1986, 1988; Rizzi 1997). In Spanish, overt subject pronouns are only used in very specific discursive environments in which their presence offer more than agreement features to the semantic interpretation. For example, overt subject pronouns (or lexical subjects) are required to remove referential ambiguity when new referents are introduced into the discourse, as seen by comparing (2) with (3). Conversely, once a discourse referent has been established it is pragmatically anomalous to use overt subject pronouns to refer to the same referent.

² Without further discussion here, I acknowledge that the universality of the EPP is an open question in syntactic theory.

- (2) *Paco y Luis no durmieron bien. *Paco y Luis/ ?ellos/∅ estarán cansadas.*
 “Paco and Luis did not sleep well. * Paco and Luis/?they/∅ must be tired.”
- (3) *No dormí bien. Paco y Luis /ellos/*∅piensan que estoy cansado ahora.*
 “I did not sleep well. Paco y Luis/they/ * ∅ think that I am hungry

Additionally, as seen by comparing (4) to (5), lexical subjects or overt subject pronouns must be used to answer topic questions.

- (4) *¿Hablaste con María José anoche?... Sí, ?yo/ ∅ hablé con ella.*
 “Did you speak to María José last night?... Yes, ?I/ ∅ spoke with her.”
- (5) *¿Quién habló con María José anoche?... yo/*∅ hablé con ella.*
 “Who spoke to María José last night? I /*∅ spoke to her”.

Moreover, the fact that embedded overt subject pronouns are most naturally understood as referentially disjoint with matrix subjects follows from the observation that they serve to express contrastive focus, as in (6).

- (6) *Todo el mundo opina que **él** tiene toda la razón [y no ella].*
 “Everyone thinks that **he** is completely right [and not her]”.

Evidently, focal stress cannot be assigned to subjects that are phonetically null, thus, overt subject pronouns are also required to establish focus, as in (7).

- (7) *Nunca pensé que tuvieras que cocinar esta noche. Juan_i me dijo que **él** ; lo haría.*
 “I never thought you would have to cook tonight. John told me **he** would do it.”

In accord with a pragmatic universal, the Avoid Pronoun Principle (APP, Chomsky 1981), which restricts the use of overt subject pronouns to cases where null subjects are impossible, the native use of overt pronominal subjects in most dialects of Spanish is limited to the above exemplified discourse-pragmatic environments. So, if the APP is a universal -- presumably available to English learners of L2 Spanish from their L1 -- why should L2 Spanish interlanguage demonstrate L1/L2 incongruence in the discourse distribution of null/overt subjects. Should this L2 target-deviancy be taken to mean that adult learners are unable to acquire necessary features needed to reset the NSP?

Chomsky (1981) suggested that the APP is a conversational principle, associated with the general rule of saying as little as minimally needed to impart an intended message. He also considered the possibilities that the APP is related to a principle of deletion-up-to-recoverability or that the APP functions as a principle of grammar. Whether the APP is a pragmatic principle or a principle of deletion, the same would hold, in that one should assume that adults know this principle via their L1. Conversely, if the APP were a principle of grammar, it could be argued that it is the APP, not the NSP, which accounts for null-subjects: the environments which license an empty category are defined independently; recourse to the APP is allowed in pro-drop languages by virtue of the definitions of the licensing conditions for empty subjects. Essentially, the APP, again, holds generally, but it is applicable only in languages like Spanish, which are pro-drop languages. There is evidence, however, that the APP is instantiated in non-null subject languages (e.g., resumptive pronouns and imperatives in English). Whether or not the APP is transferable from English, although I suspect it is, its presence does not guarantee the native Spanish distribution of null/overt pronouns. The APP merely requires that null subjects be used unless impossible. Language learners of null subject languages, child and adult alike, must learn independently what makes null subjects ‘impossible’ in that particular grammar. For Spanish, they must learn the relevant discursive conditions. Needless to say, sensitivity to the syntactic constraints of null/overt subject distribution does not guarantee the same sensitivity to the discursive constraints, at least at the same time.

In addition to the pragmatic restrictions on overt subject use in Spanish, the Overt Pronoun Constraint (OPC) (Montalbetti 1984) embodies yet another restriction. The OPC is a universal principle of grammar instantiated in null-subject grammars, which blocks the following interpretations [$*QDP/wh_i \dots [overt\ pronoun_i \dots]$], as in (8).

- (8)
- a. Each player_i thinks that he_{i/j} is the best .
 - b. Tiger Woods_i thinks that he_{i/j} is the best.
 - c. *Cada jugador_i cree que él_{*i/j} es el mejor.*
 - d. *Cada jugador_i cree que Ø_{i/j} es el mejor.*
 - e. *Tiger Woods_i cree que él_{i/j} es el mejor.*
 - f. *Tiger Woods_i cree que Ø_{i/j} es el mejor.*

In pro-drop languages, bound variable (BV) interpretations are always available between regular referential expressions with fixed referents (Miguel, María y la mujer) and embedded subject pronouns, whether overt or null. However, if the matrix subject is a variable expression (a quantified DP or *wh*-phrases), coindexation is only possible with null embedded subjects, which is to

say, the OPC blocks BV interpretations in these sentences if the embedded subject is overt, as seen in (8c).

4. *The NSP and L2 Acquisition Research*

The L2 resetting of the NSP has been examined by many researchers for many L1→L2 combinations (e.g., Al-Kasey & Pérez-Leroux 1998; Clahsen & Hong 1995; Hilles 1986; Kaltenbacher 2001; Licerias 1989; Licerias & Díaz 1999; Phinney 1987; Tsimpli & Roussou 1991; White 1985, 1986). In particular, the NSP parameter has received a privileged amount of attention in L2 Spanish research for two important reasons. First, the target-language input provides abundant triggering data. Second, it is testable given the number of superficially unrelated properties argued to derive from the setting of this parameter (see (1) and (2) in section 1). Many details aside, relevant L2 research has provided two consistent observations: (a) L2 learners do not seem to demonstrate the predicted, rapid parametric change, but rather a gradual one; and (b) clustering of all the derived properties does not appear to occur (e.g., Al-Kasey & Pérez-Leroux 1998; Licerias 1989, White 1985, 1986). Nevertheless, most authors have not correlated these observations with adult cessation to directly access UG. Conversely, they have been used either to support analyses that disassociate null-subject licensing from certain purported derived properties and/or to highlight the interference of L1 transfer.

Most relevant to the present study are the observations that English L2 learners of Spanish do two things: (a) they overuse overt subject pronouns; and (b) they attempt to produce/accept ungrammatical overt expletive subjects (Al-Kasey & Pérez-Leroux 1998; Licerias 1989; Montrul & Rodríguez-Louro 2004; White 1985, 1986). Let us further consider the possibility that, in light of these facts, resetting the NSP is possible syntactically, but L2 learners are insensitive to the discursive conditions on null/overt subject distribution. Even in the case the APP is immediately accessible via L1 transfer, lack of associated Spanish discourse-pragmatic constraints can result in L2 syntactic performance that is target-deviant. This possibility is testable because it makes the following predictions: (1) overuse of overt referential subjects concurrent with the ability to “drop” subjects in embedded clauses; (2) under use of overt pronouns in the discourse environments where they are expected (3) non-native production/acceptance of overt expletives; along with (4) knowledge of the Overt Pronoun Constraint (OPC) (Montalbetti, 1984). In the next section, the empirical study, which is designed to test these predictions, is detailed.

5. *The Study*

The present study tests 30 intermediate English learners of L2 Spanish as to their knowledge that Spanish, unlike their L1, is a pro-drop language. These L2 learners were sampled from a total of eighty L2 learners enrolled in a

study abroad program in Madrid Spain over the 2004-2005 academic year. The data reported here were collected after 5 months of residency in Spain. Participants were selected for this study if: 1) their L1 was English; 2) they had no other previous exposure to other pro-drop languages 3) this was their first extended stay in a Hispanic country; 4) they reported having no contact with Spanish outside Spanish courses prior to their arrival in Spain and 5) they were deemed to be at a mid-high level of intermediate proficiency based on oral interviews and grammar proficiency tests. The average total years of Spanish study was 4.27 with a range of 4-6 years. The mean age of the L2 group was 20.36 with a range of 18-21.

In addition to the L2 learner group, there is a native Spanish control group (n=20). Data from three types of tests are provided: (i) a logical sentence production task; (ii) a grammaticality judgment/correction task; and (iii) a co-reference judgment task (testing for the instantiation of the OPC).

5.1 *Test 1: A Logical Sentence Production Task*

In this task, the subjects were directed to form logical grammatical sentences with uninflected lexical items provided to them, in accord with a preceding context in which the subjects were presented as R-expressions. Verbs were not only uninflected, but also appeared without subject pronouns. To ensure the L2 learners would provide subject pronouns if deemed grammatically necessary, they were given a similar test in English beforehand. There were two types of test sentences: (i) expletive subject sentences (n=10) and (ii) referential subject sentences (n=10), the latter of which were sub-divided into sentences with (n=5) and without (n=5) contexts that present contrastive focus. In light of the discussion in sections 2 and 3, overt subject pronouns are only expected for type (ii) sentences with contrastive focus, an example of which is provided in (9).

- (9) *Javier y Luisa trabajan para la misma compañía internacional y tienen más o menos el mismo trabajo. Es lógico que deban ganar el mismo sueldo pero hay un desequilibrio entre los sueldos de las mujeres y los de los hombres.*

“Javier and Luisa work for the same international company and have, more or less, the same job. It is logical that they should make equal salaries, but male and female salaries are not always equitable.”

Todos/ saber/ que/ ganar/ más dinero. “Everyone/ to know/ that/ to make/ more money.”

5.2 *Test 2: A Grammaticality Judgment/Correction Task*

The second test is a traditional grammaticality judgment/correction task³. Data will be provided on the following types of sentences as in (10).

- | | |
|---|--|
| <p>(10) a) (null expletive subject)
 <i>pro hace frío afuera hoy.</i>
 “It is cold outside today”.</p> | <p>c) (null referential subject)
 <i>Nadie cuenta con María, Ø es mentirosa</i>
 “Nobody trusts Mary, she is a liar”.</p> |
| <p>b) (overt expletive subject)
 <i>*Lo llueve en las montañas.</i>
 “It is raining in the mountains”.</p> | <p>d) (overt referential subject)
 <i>¡No puede ser! María juró que ella lo haría.</i>
 “Impossible! Mary swore she would do it”.</p> |

The participants were instructed to leave unmarked the sentences they believed grammatical and, conversely, to correct any of the sentences they deemed ungrammatical. They were also instructed to indicate if a sentence seemed ungrammatical to them, yet they were unable to fix it. There were eight exemplars for each sentence type except for the filler sentences (n=40), which included word-order and agreement violations.

5.3 Test 3: Co-reference Interpretation Task: L2 Knowledge of the OPC

This final test examined L2 knowledge of the Overt Pronoun Constraint (Montalbetti 1984), a [+ null-subject] associated principle of grammar discussed in section 3. Pérez-Leroux & Glass (1999) used a context translation task to test L2 OPC knowledge in intermediate Spanish. The present test aimed to verify their findings of L2 OPC instantiation, however, a different type of task was used, namely a co-reference interpretation task modeled after Kanno’s (1998) OPC test for L2 Japanese. The subjects were provided with contextualized sentences of four types (n=10 each) and were asked to read each exemplar circling their immediate interpretation, as in (11).

- (11) a) **Null embedded pronoun with quantified/*wh* matrix subject**
¿Quién no sabe que Ø tiene derecho a votar a los 18 años?
 “Who do you suppose does not know that he has the right to vote at 18?”
 a) the same as *Quién* b) someone else
- b) **Null embedded pronoun with DP matrix subject**

³ Given the issues involved in GJTs (Sorace 1996), perhaps the only reason to use GJTs is to test L2 knowledge of ungrammaticality. Thus, the most relevant item from this test is (4b).

contrastive focus environments. While this is also true of the native Spanish control (NSC) the pattern of overt subject use of the L2 learners contrast sharply with the NSC pattern, as can be seen in the last column of Table 1. Out of 5 contexts that presented contrastive focus (CF), a discursive environment requiring overt subjects in Spanish, the NSC group used overt subject pronouns an average of 4.85 times as compared to the L2 group's average use of 1.3 overt subject pronouns in these contexts. This L1/L2 difference is quite statistically significant ($t = 14.89$, $p < 0.001$).

	Overt Expletive (OE)	Overt Referential (ORS)	Overt Referential w/CF (ORCF)
NSC	0	0	4.85
L2 Learners	0	0.17	1.33

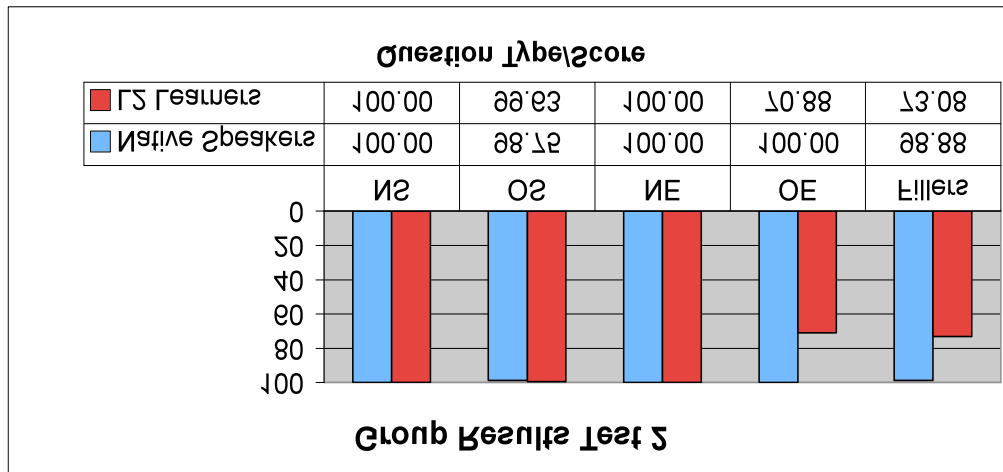
*Results reported as number of overt subjects used. OE n=10, ORS n=5, ORFC n=5

Table 1: Group Results from Test 1

The L2 learners clearly perform this task differently than they would in their L1. As a group, they produce sentences in L2 Spanish without overt referential subject (in embedded and matrix positions) and expletive subject pronouns. However, given their performance with contrastive focus environment sentences, it is equally evident that they do not have knowledge of the pragmatic requirements for overt subject use in Spanish.

6.2 Test 2: The Grammaticality Judgment/Correction Task

As can be seen in Figure 2 below, there was virtually no variation for any test sentence type for the native control. Compared to the NSC, the L2 learners performed like native Spanish speakers in judging Spanish null subject (no deviation), overt subject ($t = 0.87$, $p = 0.391$), and null expletive subject sentences (no deviation) sentences. However, given the limitations of GJTs, it was crucial that the L2 learners demonstrated knowledge of what is fundamentally blocked by the target grammar. That is, most important was the determining of their (in)tolerance for Spanish overt expletive subject sentences. Despite the fact that the L2 learners performed native-like on two sentence types that are ungrammatical in their L1, they also performed in a target-deviant manner for overt expletive subject sentences in Spanish and on many of the filler sentences. This is an important revelation considering the fact that of the five sentences types for which data are reported overt expletive and the filler sentences were the only ones that are restricted (i.e. contained morphosyntactic errors) in Spanish.



NS= null referential subjects, **OS**= overt subjects, **NE**= null expletives, **OE**= overt expletives, **Fillers**= word order & gender

Figure 2: Group Results Test 2

On average, the L2 aggregate corrected ungrammatical overt expletive sentences 70.9 % of the time (5.67 out of 8 times) while the Spanish natives corrected these sentences 100% of the time, resulting in a significant L1/L2 difference ($t = 4.43$, $p < 0.001$). However, the L2 aggregate mean is not indicative of each individual performance, but rather reflects the averaging of a wide range of individual performance rates, varying from 0% to 100% correction of these ungrammatical sentences. Eighteen of the 30 L2 learners fail to correct ungrammatical overt expletive sentences 25% of the time or more. Of this same group, ten accept overt expletive sentences 50% of the time or more. While these individual learners allow for overt expletive pronouns in their judgment of Spanish sentences, all of them simultaneously demonstrate knowledge that expletive subjects can be null in Spanish. In fact, if we couple the results of Test 1 with Test 2, we note that all subjects consistently judge correctly null expletive subject sentences as well as produce them. At this particular point in IL development, it appears that in regards to expletive subject pronouns, many of the L2 learners have grammars that are both different from their L1 and from the target L2. Additionally, there was an even greater L1/L2 difference for the filler sentences ($t = 8.45$, $p < 0.001$), which almost exclusively related to morphological agreement errors that were not corrected. However, as we will discuss, it should not be taken for granted that these L1/L2 differences reflect syntactic deficits.

6.3 Test 3: Co-reference Judgment Task

As can be seen in Table 3 below, the L2 subject group data demonstrate a *sensitivity* to the OPC, confirming the findings of Pérez-Leroux & Glass (1999) for intermediate English learners of L2 Spanish. As a group, the L2 learners derive bound variable (BV) interpretations for sentences in which the embedded subject is overt only 34.3% percent of the time when the matrix subject is a quantified DP (QDP) or *wh*-element as compared to 81% when an embedded subject pronoun is not PF-expressed ($t = 10.16$, $p < 0.001$). Additionally, there is a significant difference in BV interpretations for the group with reference to the type of subject in matrix position (QDP/*wh*-phrase vs. NP) when there is an overt embedded subject ($t = 8.25$, $p < 0.001$).

	QDP/Overt	QDP/Null	DP/Overt
SNC BV	0.9 out of 10 9%	7.65 out of 10 76.5%	3.9 out of 10 39%
L2ers BV	3.43 out of 10 34.3%	8.10 out of 10 81%	6.1 out of 10 61%

Type of coreference interpretation (BV or DR) in a particular context of matrix subject type (a QDP /*wh* or DP/NP) and embedded subject pronoun type (overt or null).

Table 3: Group Results for Test 3

Despite the L2 OPC sensitivity, the L2 aggregate does not perform completely like the native Spanish control for both relative comparisons. Comparing the difference in BV interpretations in QDP/Overt or QDP/Null contexts for the native speakers vs. the L2 learners yields a statistically significant difference ($t = 3.31$, $p = 0.002$). Comparing the difference in BV interpretations when overt embedded subjects are used with matrix subjects that are either a QDP or a DP (QDP/Overt vs. DP/Overt) between the two groups surprisingly yields no significant difference (QDP/*wh*- vs. NP: $t = 0.68$, $p = 0.501$). However, upon further inspection it was found that this lack of significance was due to a similar interval of difference for the QDP/Overt vs. DP/Overt sentences, and not actually caused by the L2 learners demonstrating native-like behavior. Pérez-Leroux & Glass find the same group trend for intermediate L2 learners. However, one should ponder what this group *sensitivity* to the OPC actually indicates? In an effort to investigate this reasonable question, we turn to the data of individual L2 learners.

The individual data shows that ten of thirty individual subjects do not demonstrate knowledge of the OPC at all, rendering the overall group divisible into two subgroups: (i) those that have clear knowledge of the OPC ($n=20$); and (ii) those who do not have knowledge of the OPC ($n=10$). It is the averaging of these two subgroups that creates the semblance of an OPC tendency for the

entire group. Pérez-Leroux & Glass do not comment on individual data, rendering it impossible to determine if their observed OPC sensitivity is also a result of a strict aggregate analysis. Re-doing the statistics for only the subgroup of L2 subjects who demonstrate knowledge of the OPC, the group rate of BV interpretations in OPC restricted contexts drops from 34.3% to 19.5%. The rate of BV interpretations in contexts with QDP/wh-matrix clause subjects with a null embedded subject increases to 83%. Thus, the difference in interpretation of coreference based on the presence or lack of overt embedded subjects when the matrix subject is a QDP/wh- is 63.5% ($t = 12.22$, $p < 0.001$) for this subgroup, showing no statistically significant difference when compared to the SNS mean difference of 67.5% ($t = 0.68$, $p = 0.5$). Furthermore, the difference in BV interpretations for this subgroup with reference to the type of subject in matrix position (QDP/wh- vs. DP) when there is an overt embedded subject ($t = 7.93$, $p < 0.001$) is native-like ($t = 1.24$, $p = 0.225$).

7. *Discussion of Results*

In this section, the data from the three tests are coupled together as they relate to the research questions. The first asked if it was possible for English L2 learners of Spanish to acquire the necessary morphosyntactic features associated with Spanish verbal morphology, which result in EPP-feature checking via V-raising alone. The data from all three tests suggest that this is possible by the intermediate level of IL development and thus provides evidence of L2 feature acquisition by adult learners *in contra* the *Failed Functional Features Hypothesis*. Firstly, the data from Test 1 demonstrate that the L2 learners are able to produce sentences without overt subject pronouns. This is true for expletive and referential subjects in matrix and embedded clauses. Since the EPP-feature is universally strong, some syntactic process must check this feature. In English, the EPP-feature must be checked by XP-merge since English has no nominal feature associated with its verbal morphology. The fact that the L2 learners are able to consistently produce null subject sentences in L2 Spanish in contexts not licensed in English must entail that the EPP-feature is checked without merging a subject pronoun to the Spec of AgrSP (see Tsimpli & Roussou 1991 and Licerias & Díaz 1999 for alternative accounts). The only way to do this, without assuming non-linguistic rules, is to imagine that the nominal features associated with Spanish verbal morphology of Spanish were acquired. Data from Test 2, which demonstrate that these L2 learners reliably judge *pro-drop* sentences supports the observations from Test 1.

Given L2 knowledge of the OPC, the data from Test 3 serve to crystallize the conclusions drawn. Grammatical restrictions like the OPC are never taught in formal instruction (cf. Kanno 1998; Pérez Leroux & Glass 1997). Furthermore, the OPC is unable to operate in the particular grammar of English, which does not permit empty subjects. As a result, knowledge of the

OPC in these participants is a classical example of *the logical problem of L2 acquisition*. It is widely accepted that the OPC is associated with setting the NSP to the Spanish-type value. Test 3 demonstrates that 20 of the 30 L2 subjects have native-like knowledge of the OPC. This is the ultimate criterion in determining that these 20 L2 learners have reset the NSP at this particular point in IL development.

It must be noted, however, that a closer analysis of the sentences produced in Test 1 revealed a possible relationship between verbal morphological knowledge and OPC knowledge. That is, 7 of the 10 subjects who do not demonstrate OPC knowledge had a greatly impoverished performance with the production of verbal and nominal morphological agreement as compared to several of their peers, who more or less performed native-like. Since learning the verbal morphology inclusive of associated features is necessary for resetting the NSP and EPP-checking in Spanish, this relationship may be quite significant. However, in light of syntax-before-morphology evidence (e.g., Lardiere 1998a, 1998b, 2000; Prévost & White 1999, 2000; Schwartz 2003) it is not clear that this seeming pattern relates to anything more than the ubiquitously reported problems in L2 surface morphology production. This possibility is supported by several facts. Firstly, some L2 learners who had native-like knowledge of the OPC also did poorly with morphological production in Test 1. Secondly, the remaining three L2 learners who did not demonstrate knowledge of the OPC performed more or less native-like with morphological production in Test 1. Lastly, a look at Test 2 revealed no absolute correlation between poor L2 morphological production (test 1) and poor L2 correction of morphological errors (test 2). That is, some L2 learners who did poorly on morphological production in Test 1 (including 3 of the 7 discussed above) did rather well with agreement correction in Test 2, and vice versa. While parameter resetting and the learning of L2 features must be possible in adulthood, as evidenced by the OPC knowledge of 20 of the present 30 subjects, it is not clear that all adult learners will do so congruently, which merely suggests that the timing of learning can be variable.

The second research question asked if the hypothesized independent development of pragmatics and syntax could be attested to and, if so, how the lack of pragmatic knowledge may explicate certain apparent syntactic errors in L2 performance. It was suggested that this idea would be testable in the present study because it predicted that English L2 learners of Spanish could have: (1) the ability to produce and judge null referential subjects concurrent with the overuse of overt referential subjects in environments that are pragmatically odd and/or their under use in discursive environments that require them and (2) non-native production/acceptance of overt expletives, despite knowledge of the Overt Pronoun Constraint (OPC) (Montalbetti 1984).

Contrastive focus contexts in Test 1 were used to see if the L2 learners acquired the discourse-pragmatic knowledge that requires the use of overt subject pronouns in Spanish. The data of Test 1 indicated a sensitivity to the syntactic constraints on null/overt subject distribution in Spanish, coexisting with an insensitivity to the pragmatic conditions on their discursive distribution. Given the structured nature of the test, overuse of overt subject pronouns was not observed. Although the more commonly reported target-deviant use of subject pronouns in L2 Spanish is a unidirectional reporting of overt subject overuse, a bidirectional under and overuse of overt subject pronouns has been reported to typify L2 Spanish null/overt subject pronoun distribution as well (Montrul & Rodríguez-Louro 2004). In fact, the under-use of overt subject pronouns is more consistent with a grammar regulated by the APP, which should be immediately accessible via the L1. As discussed earlier, access to the APP alone does not result in the particular grammar distribution of null/overt subject pronouns of Spanish. That is, the APP merely stipulates a favoring of null subjects whenever possible. The fact that the vast majority of L2 learners did not produce overt subject pronouns in CF environments can only be accounted for in terms of their insensitivity to the discursive properties of Spanish that, in conjunction with the APP, render null subjects impossible in particular discourse contexts.

It has been widely noted that English learners of L2 Spanish typically overuse overt subject pronouns in production, which seems counterintuitive if the APP is indeed accessible via the L1. Although this was not observed in the present study, it deserves some attention as this observation too can be explained via L2 insensitivity to discourse-pragmatic constraints. Sorace (2000, 2003) has discussed the fact that L2 learners, even at highly advanced levels of proficiency, often exhibit what she calls residual optionality in interface-conditioned syntax as a result of L2 extended use of L1 options, often in light of a lack of unambiguous input from the target L2. English learners of L2 Spanish receive positive evidence that overt subjects are possible in Spanish. Moreover, the use of overt subjects in most discursive contexts is not wrong syntactically, but rather pragmatically anomalous. In light of L2 insensitivity to Spanish discursive constraints that regulate null/overt pronoun distribution, Spanish input is not entirely unambiguous. In this case, English can weigh heavily on the choice employed at the level of discourse, favoring the alternative closest to the L1. As a result, a target-deviant distribution obtains as a result of the missing discursive knowledge that is crucial to the native-like use of null vs. overt subject pronouns in Spanish.

In Test 2, it was revealed that these L2 learners tolerated ungrammatical overt expletive subjects in Spanish. Since null subject grammars employ null expletive pronouns, it seems reasonable that data from Test 2 could be interpreted as evidence that these grammars are syntactically target-deficient.

Importantly, however, it was never the case that an L2 learner rejected null expletive sentences. Additionally, in Test 1 all L2 learners produced all relevant sentences with null expletive pronouns. This is important because it highlights the fact that they know expletive subjects can be (and perhaps most naturally are) null in Spanish. It appears that for some L2 learners, however, both types are possible. It should be noted that while rare and certainly not the case for most dialects of Spanish, there are pro-drop grammars that permit overt expletives such as Galician and European Portuguese (Raposo & Uriagereka 1990). In Spanish, however, overt expletive subject pronouns never meet the pragmatic requirements for overt subjects since, lacking semantic content, they cannot receive contrastive or focal stress. As a result, the purported lack of necessary discourse-pragmatic constraints can explain the L2 tolerance of overt expletive subjects as well. Ultimately, knowledge of the OPC confirms the native-like NSP syntactic knowledge for many of these L2 learners, several of whom allow ungrammatical overt expletive pronouns in L2 performance. Thus, we may speak of a case where L2 pragmatic deficits infringe on syntactic performance.

8. Conclusion

Over the past decade, Full Access approaches to adult L2 acquisition have made great progress in determining what variables, in addition to L1 transfer, result in L1/L2 disparities despite demonstrable adult UG-continuity (e.g. Goad et al. 2003; Prévost & White 1999, 2000; Schwartz 2003; Sorace 2000, 2003). While it remains to be seen if the majority of adult learners is truly unable to achieve native-like mastery of an L2, it seems clear that there are mitigating circumstances in L2 acquisition whereby a one-to-one comparison of adult L2 grammars to target native L1 grammars is not an entirely fair comparison.

In light of the syntax-before-discourse observation, the present study hypothesized that the syntax-pragmatics interface is one of the mitigating factors that results in variable L2 target-deviancy. As it pertained to the distribution of null/overt subject pronouns in L2 Spanish interlanguage, we observed the real possibility that L2 target-deviant syntactic performance for particular properties is best explained in terms of deficits in discourse-pragmatic knowledge despite sophisticated native-like syntactic knowledge. As a result, it is assumed that UG constrains L2 acquisition in general and that the syntax-pragmatics interface is yet another contributor to the very observable occurrences of target-deviant performance in adult IL development.

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