

## **A parametric interpretation of learners' errors: The acquisition of Spanish null subjects**

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*One contribution that the study of language acquisition can make to language instruction is a reassessment of learners' errors. The study of second language acquisition can inform the teaching profession by providing practitioners with an understanding of the nature of grammatical errors. Many second language learners' grammatical errors can be best understood as indicators of a developmental process that is deep and internal, rather than as a failure to learn classroom material. In this study we argue that an assortment of various errors with pronouns in the second language acquisition reflects necessary steps in language development. An examination of written data gathered from university level students reveal that some learners have not acquired the deep properties of the null subject grammar of Spanish. However, these data also provide evidence that a number of the subjects have internalized some of the subtle semantic rules that govern pronoun usage in Spanish.*

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*Una contribución que el estudio de la adquisición del lenguaje puede aportar a la enseñanza de lenguas modernas es la reevaluación del papel de los errores en el aprendizaje. El estudio de la adquisición de segunda lengua puede informar la pedagogía al proveer a los maestros con una explicación de la naturaleza de los errores gramaticales. Muchos de estos errores deben ser entendidos como indicadores de un proceso de desarrollo profundo de una gramática internalizada, y no como un fallo en el aprendizaje de los materiales de clase. En este estudio se argumenta que una variedad de errores con pronombres en la adquisición del español como segunda lengua refleja etapas fundamentales del desarrollo lingüístico. Una evaluación de los errores evidentes en las composiciones escritas por estudiantes universitarios revelan que algunos aprendices no han adquirido las propiedades profundas del parámetro del sujeto nulo de la lengua española. Sin embargo, los datos experimentales también aportan evidencia de que un número de sujetos han internalizado algunas de los principios profundos que gobiernan el uso pronominal en español.*

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## Introduction

As language practitioners we often talk about what languages we “teach”, how to “teach” a particular structure, and so on. While it is not the point of this article to enter into the debate on the effects of instruction on second language acquisition (SLA), the use of the term “to teach” with reference to language may appear to ignore altogether the role of the learner in the acquisition process. Indeed, one could go so far as to interpret the acquisition of language as little more than the memorization of lexical items and the rules of syntax that have been “taught” and then practiced as if habits. Although no longer a valid view of language acquisition, behaviorist theory predominated in the field as recently as three decades ago. While contemporary linguistics and theories of acquisition no longer adhere to this view, language teaching practice is still often conducted with the underlying assumption that language can be taught, in the behaviorist sense, i.e., that presentation of the stimulus (the language), repetition through drilling, and reinforcement (approval or corrective feedback) will result in the acquisition of language.

The contemporary field of SLA dates from approximately 30-40 years ago (Gass and Selinker 1994). As it has matured and developed into an autonomous discipline, it has also further distanced itself from a language pedagogy agenda.<sup>1</sup> That is, as the research agenda on language acquisition has become more defined, the connection between this research and language teaching has become increasingly tenuous. However, whereas the goal of modern language acquisition research is not explicitly to develop solutions to classroom problems, its results can be used to interpret classroom processes.

In this article we suggest that a connection can be developed between second language acquisition research on Spanish subject pronouns and the observation of errors in the classroom. We argue that the language practitioner may use the findings from SLA research to achieve a more productive and accurate understanding of the nature of grammatical errors. The paper is organized into four sections: 1) the problem of connection between SLA research and language pedagogy; 2) the syntax of the Spanish null subject pronouns; 3) errors in acquisition and the null subject parameter; and finally 4) an experimental study examining the acquisition of semantic constraints on the overt/null subject alternation.

<sup>1</sup> Gass and Selinker (1994) note that early scholarly publications dealt primarily with issues in language teaching and only had secondary interest in language learning. The last 20 years, however, have seen the emergence of SLA as an independent field of inquiry, with a separate agenda. As testament to this autonomy are the journals devoted specifically to SLA (*Studies in Second Language Acquisition*, *Second Language Research*), the increasing number of scholarly articles on second language studies, and the publication of numerous books (Gass and Selinker 1994; Tarone 1988; Towell and Hawkins 1994; White 1989) and edited volumes (Freed 1991; Gass and Schacter 1989; Glass and Pérez-Leroux 1997; Pérez-Leroux and Glass 1997; VanPatten and Lee 1990) treating SLA in general as well as its various subtopics.

## The Problem of Connection

We view it as rather ironic that the more we have come to know about language acquisition the less we seem to extend these findings to the language classroom. This is not to say that language pedagogy has been ignored altogether. Indeed, numerous journals continue to devote themselves to language teaching (*Modern Language Journal*, *Foreign Language Annals*) and many recent publications continue to examine pedagogical concerns (Richards and Lockhart 1994; Lee and VanPatten 1995). Nonetheless, the relationship between SLA research and language teaching seems rather guarded, at best. Few instructors, for example, see the applicability of research on parameter resetting or information processing to their own classrooms. Likewise, the individuals conducting such research might also overlook or ignore ways in which their findings might inform the practitioner. While we respect the legitimacy of the practitioner's skepticism of research insights and the researcher's separation from pedagogy—after all, SLA is first and foremost concerned with how languages are learned, not taught—we also believe that a greater dialog could be opened between the two groups.

The issue of whether a connection should be made or even can be made between SLA research and language teaching has surfaced periodically throughout the years. As early as 1976 Tarone and her colleagues warned against premature pedagogical applications of research findings, suggesting instead that one of the primary contributions that SLA research can make to language pedagogy is to effect a change in attitude in instructors. In short, the implications are that SLA research may be most useful in teacher education.

Lightbown (1985) also expressed doubt about the applicability of research findings with regard to *what* to teach. Her view, which echoes Tarone's view from a decade earlier, recognizes the contributions that SLA research can make to teacher training. This is a position that she, in conjunction with her coauthor Nina Spada, continues to advocate in their 1993 text *How Languages are Learned*. The two state in their introduction: "We believe that information about findings and theoretical views in second language acquisition research can make you a better judge of claims made by textbook writers and proponents of various language teaching methods. Such information, combined with insights gained from your experience as a language teacher or learner, can help you evaluate proposed changes in classroom methodology." (1993: xiii).

Ellis (1990) also warns of the danger of applying the findings from (classroom) research directly to teaching in the form of specific methods or techniques. He argues that such "piecemeal" application of results should be avoided, and that research should be directed at building a theory of language learning. In his view it is only after a theory of language learning has been constructed should pedagogical advice be forthcoming.

Another perspective on research and teaching is offered in Bahns (1990), who maintains that the SLA researcher should act as consultant rather than as initiator of

change. According to Bahns, “[the initiative for applying research results of any kind to any field of practice whatsoever should come from the practitioners themselves.” (1990:115) Accordingly, the practitioner should feel the desire and need to consult research, though not necessarily be guided by it.

In short, the relationship between SLA research and language teaching has historically been somewhat attenuated, and while certain factors (e.g., comparability of contexts) have at times rightly constrained the application of research findings, we contend that practitioners can benefit from a knowledge of SLA research. Language instruction, as with any discipline, should imply at least cursory knowledge about theories of learning. Thus, SLA research insights can inform language practitioners minimally by providing a greater understanding of what is known about language acquisition and what this implies in terms of the learner’s developing grammatical system.

In accord with the insights gleaned from linguistic theory and acquisition research, it seems more appropriate to think of the “learning” of language rather than the “teaching” of language. Whereas teaching connotes such external factors as error correction and presentation of rules, learning recognizes the subconscious internal acquisition of a developing grammatical system (i.e., syntax, phonology, morphology). We are reminded here of Chomsky’s distinction between I-language (internal or intensional language), which is the subconscious knowledge of the language that the learner possesses, and E-language (external or extensional), which constitutes the actual strings generated by the I-language (Chomsky 1986).<sup>2</sup> The utility of this distinction is seen within the context of L2 classrooms, where adult learners, armed with a “language instinct” (Pinker 1994), construct a grammar based on the experience provided by the environment.

To illustrate this perspective, let’s look at the question of learner errors in classroom instruction—an area of interest to both the instructor and the psycholinguist. By examining learners’ errors from an internal rather than an external perspective, we are able to distinguish between the occasional error attributable to performance, lexical retrieval, etc., and the systematic error which results from the projection by the learner of a different grammar, i.e., I-language. If one only considers language as external, errors are simply errors. However, if one considers language from an internal, constructivist perspective, not all errors are equal. Some errors are truly performance errors, whereas other are symptoms of different grammars, and efforts should not be directed at simply changing the surface but rather at modifying the grammar. Thus it is important to distinguish systematic from unsystematic errors (Towell and Hawkins 1994). Furthermore, certain error patterns that may appear on the surface to pertain to different aspects on grammar stem from the same underlying grammatical states.

<sup>2</sup> In the L2 literature, the internal grammar is often referred to as the learner’s ‘interlanguage’ (Selinker 1972), which refers to the systematic, rule-governed language that is neither the L1 grammar or the L2 grammar, but rather is on a continuum somewhere in between.

## The syntax and semantics of subject pronouns

Linguistic theory makes a distinction between innate principles (which reflect invariant features of human languages) and parameters (which reflect areas of variation between languages) (Chomsky 1981). According to parameter theory, acquisition of the grammar of a first language occurs by setting the appropriate values for the parameters of the mother tongue, based on features of the input. A central issue in second language acquisition research is the question of whether resetting the value of parameters is possible in adulthood. In other words, is the ability to acquire grammatical knowledge dependent on the adoption of new parametric values impaired in adults?

In the field of acquisition, one of the best understood domains of parametrization is the case of the null subject parameter (Rizzi 1982; Hyams 1986; Jaeggli and Safir 1989). Null subjects are often found in correlation with a set of other structural characteristics: rich inflection, possibility of clitic climbing (which occurs in the null subject Romance languages), free subject inversion, absence of the ungrammatically effect of that-trace configuration and the presence or absence of expletive ('dummy') pronouns in the language. Below we compare some features that distinguish English and Spanish:

	English	Spanish
null subjects	*Arrived.	Llegó
verb agreement	Ø, Ø, -s, Ø, Ø, Ø	-o, -s, Ø, -mos, -is, -n
inversion	* Arrived John	Llegó Juan
that-trace effects	*Who did Mary said that came?	¿Quién dijo que venía?
expletive subjects	It rains	Llueve

Subjectless sentences in languages like Spanish are analyzed as having a null variant of the subject pronoun, *pro*, whose features of person and number are identified by the inflectional markings of the verb.

- (1) *pro* llegó.  
 Él llegó.  
 'He arrived.'

Although different proposals exist regarding the question of which property of the grammar is responsible for licensing these null subject pronouns, there is consensus that the structural correlations listed above depend on a single parameter, the null subject parameter, or pro-drop parameter.

In addition to the structural differences between pro-drop and non pro-drop languages, there exist some semantic differences. In pro-drop languages like Spanish, the null and the overt subject pronoun are not freely interchangeable. The overt/null sub-

ject pronoun alternation is subtly guided by both pragmatic and semantic restrictions, as has been noted by traditional as well as generative grammarians:

Las desinencias personales de la conjugación española son tan claras y vivaces que casi siempre hacen innecesario y redundante el empleo del pronombre sujeto [...] Sin embargo, el sujeto pronominal se emplea correctamente en español por motivos de énfasis expresivo, o para evitar alguna ambigüedad posible, según las circunstancias particulares en cada caso. (RAE 1991: 421)

...subject pronouns are used in Spanish only in special circumstances [...] the distribution of subject pronouns is guided by what could be considered 'functional' considerations. (Jaeggli 1982: 136)

These functional effects, suggests Jaeggli, may be an instantiation of a universal Avoid Pronoun Principle (Chomsky 1981). This principle predicts that the overt pronoun will only be used when necessary, as in the case of contrastive focus. Since null subjects may not be focused, only overt pronouns can serve this function (Grimshaw 1995). When a subject position needs to be contrasted, as in (2), an overt subject is obligatory:

- (2) a. Ella nos ayudó, pero no José,  
b. #nos ayudó, pero no José.  
'(She) helped us, not José.'

Example (2b) is odd, because the use of the null pronoun sets the subject as topic-connected, in the background of discourse, and the *pero* clause cannot stand in contrast with it. (2a), on the other hand, is felicitous because *José* can contrast with the overt *ella*. This behavior is subsumed by the description below:

- (3) Contrastive Focus: In null subject languages, overt pronouns are perceived as stressed or emphasized.

This fact has direct consequences for the overt/null subject pronoun alternation. As Grimshaw points out, the overt/null alternation is never optional: dropping of a subject is restricted to arguments connected to a discourse topic, and applies obligatorily to such arguments. We summarize this as below:

- (4) Discourse Continuity: In null subject languages, null pronouns are used to signal maintenance of a discourse topic for which the referents have already been identified.

Consequently, null subject pronouns are often interpreted as coreferent with previous subjects. In example (5),

- (5) Margarita besó a José y le dio un empujón.  
'Margarita kissed José and shoved him.'

the subject of 'dió' is left unexpressed, and the embedded clause is interpreted to say that Margarita pushed José. These effects appear in discourse as well as within the sentence:

- (6) Margarita ayudó a su hermana. Tenía que traer diez cajas de libros del sótano a la oficina.  
'Margarita helped her sister. (She) had to bring ten boxes of books to the office basement.'

Again, the natural interpretation is that Margarita was the person who had to bring ten boxes to the office. If an expressed subject is used, it can be interpreted as implying a change of agent:

- (7) Margarita ayudó a su hermana. Ella tenía que traer diez cajas de libros del sótano a la oficina.  
'Margarita helped her sister. She had to bring ten boxes of books to the office basement.'

Here, it is possible that the second sentence refers not to Margarita's duties, but to her sister's.

There is another syntactic domain where the overt/null pronoun alternation is clearly regulated: in variable binding environments. Montalbetti observed some differences between null and overt pronouns in contexts where the pronouns could be linked to a syntactic variable, such as the one created by question formation, as in (8), or with quantifier structures, as in (9) (Montalbetti 1984).

- (8) a. ¿Quién *t*. piensa que *pro*. es inteligente?  
b. ¿Quién, *t*. piensa que él. es inteligente?  
'Who thinks that (he) is intelligent?'

One may construe two possible interpretations of these questions: one as asking about the set of individuals that think of themselves as intelligent, and the other as the set of individuals that think that somebody in particular, i.e., whoever *él*, refers to, is intelligent. Example (8b) lacks the first possibility: the subject *él* appears to refer exclusively to a unique particular individual. Example (8a) lacks this limitation, and it can have either interpretation. The distinction can perhaps be perceived more clearly with the variable created by the use of a quantifier phrase such as *nadie*:

- (9) a. Nadie<sub>i</sub> piensa que *pro*<sub>i</sub> es inteligente.  
b. Nadie<sub>i</sub> piensa que el<sub>i</sub> es inteligente.  
‘Nobody thinks that (he) is intelligent.’

Montalbetti noted that this interpretive constraint was not relevant for all pronouns, but rather was limited to those in an overt/null alternation. To account for the restriction on the interpretation of overt pronouns he proposes the following constraint:

(10) Overt Pronoun Constraint (OPC)

Overt pronouns cannot link to formal variables IFF the alternation overt/empty obtains.

In other words, overt pronouns will receive a deictic (individual) interpretation, while null pronouns can have either interpretation.<sup>3</sup>

OPC-like effects show up in typologically different languages, and in different constructions (Jaeggli and Safir 1989).<sup>4</sup> This makes OPC a candidate to be a universal constraint. The subtlety of the semantic and pragmatic constraints regulating the overt/null subject pronoun alternation makes this domain a promising area of research into the acquisition of the null subject parameter (Strozer 1992; Strozer 1994). These patterns are not obvious even to native speakers, and are not often the topic of formal instruction. Therefore, if the adult L2 speaker of Spanish exhibits patterns of pronominal use that are compatible with OPC, and with the principle of contrastive focus and discourse continuity, one may consider the possibility that such knowledge originates from the language instinct. The topic of null anaphora has been the object of much research in second language acquisition research in recent years (Polio 1995). We examine next the course of acquisition of the grammar of Spanish subject pronouns, concentrating on the kinds of pronoun ‘errors’ that an instructor may find.

### **Pronoun errors and research into the pro-drop parameter**

Intermediate proficiency English learners of Spanish often exhibit two types of classroom errors related to subject pronouns:

<sup>3</sup> To illustrate, the logical form of the bound variable interpretation of sentence (9a) could be as in (i)

(i) there is no *x*, such that *x* thinks *x* (himself) is intelligent

where *x* ranges over a set of individuals. This is different from the individual interpretation of the pronoun, which has the logical form as in (ii):

(ii) there is no *x*, such that *x* thinks that he is intelligent

where he is not coreferent with *x*, but denotes an individual previously identified in the discourse

<sup>4</sup> Restrictions on variable interpretation of overt pronouns have also been observed in the null topic construction in Chinese (Xu 1986), and in the residual pronoun/gap alternations in *wh*-movement languages (Sells 1984).



- use of object pronouns as subject pronouns
- overuse of subject pronouns

Let's consider the possibility that both types of errors may be related in acquisition, and then ask what are some of the problems and consequences of this view.

Earlier research on the acquisition of null subject languages (Phinney 1987; Licerias 1988; Licerias 1989) found some of the pro-drop properties of the language well established early in the interlanguage grammar. The general finding is that null subjects in general did not present difficulty for adult learners. Licerias and her colleagues recently studied the earliest stages available in the interlanguage of Spanish (learners after only fifty hours of instruction), and found use of null subjects to common in oral production (Licerias et al. 1997). Licerias (1989) and Phinney (1987), considering both natural and experimental data, did not find evidence of lexical expletives transferred into their Spanish interlanguage. This latter assertion has been challenged by the existence of examples such as (9), in which the pronoun *lo* is used in lieu of the English non-referential subject (Alkasey and Pérez-Leroux 1997). Errors such as seen in example (11) probably arise as the result of the learners' attempt to translate the pronoun *it* as the object pronouns *la* and *lo*, indicating lack of knowledge of the case marking system of Spanish, and of the difference between full pronouns and clitic object pronouns.

- (11) \*El reloj no es mío, **lo** es ajeno.  
'The clock is not mine, it is someone else's.'
- (12) \***Lo** ha sido mi experiencia trabajar con el público.  
'It has been my experience to work with the public.'  
(from Alkasey and Pérez-Leroux 1995)

More interesting is the use of an object pronoun in sentences such as (12). Such examples point to the possibility that learners are still treating subject pronouns as obligatory, as in English, and are using the pronoun *lo* to fill up the subject position, even in cases where the subjects are semantically empty, and thus, impossible in Spanish. This is interesting from the point of view of parameter resetting. Alkasey and Pérez-Leroux speculated that the reason learners were misusing object pronouns, and overusing overt subject pronouns was the same: because they had not yet reset the null subject parameter.

The hypothesis of a stage where learners have not switched to a null subject grammar has been further supported by the experimental finding that Spanish learners from an English background have a tendency to maintain a strict subject-verb-object (SVO) order in comprehension (Bever 1970; Lee 1987; VanPatten 1987; Alkasey and Weston 1992). It was observed that non-native speakers of Spanish interpreted noun-verb-noun sequences as a SVO, even when the first NP is an object pronoun. This tendency led some students in Alkasey and Weston (1992) to translate examples such as (13) as in (14):

- (13) Te ayudé.  
‘I helped you  
(14) You helped me.

In writing samples gathered from learners in intermediate level Spanish courses, the use of clitic pronouns instead of subject pronouns was identified in spontaneous production, as shown by (15):<sup>5</sup>

- (15) Cuando está usada de manera correcta, **la** trae juntos todos los aspectos del language [sic]. (Student C)  
‘When used in a correct manner, it (=literature) brings together all aspects of language.’

Although these cases were by no means frequent, their existence is significant. One could say that the learners who produce these errors, even if they produce null subjects, have not yet acquired the fundamental properties of the null subject parameter. The facts are clear: these learners tend to avoid inversion structures in both processing and production (i.e., the SVO word order effect), and they are willing to insert overt expletive subjects. Furthermore, the existence of a non-nominative clitic subject error in the interlanguage indicates that these learners have yet to acquire the basic properties of the Spanish pronominal system.

The second subject pronoun error identified in the Spanish interlanguage, namely, pronoun overuse, reflects an uncertainty in the mastery of the conditions regulating the overt/null subject pronoun alternation. Fleming (1977) found overuse of subject pronouns to be the second most frequent error in his study of errors in written Spanish of intermediate speakers. This is not often corrected as an ‘error’ in the classroom, though it reflects a performance that is distinctly non-native. Note in the following paragraph from a fragment written by a speaker of intermediate proficiency that the use of *ellos* and *profesores* far exceeds what a native speaker would produce.

- (16) Hay **profesores** que no creen que la literatura sea importante a un estudiante que quiera un título en los negocios o la ingeniería. **Ellos** creen que los estudiantes de lengua tienen que aprender cosas más prácticas para funcionar en otros países. Pienso que **ellos** no comprenden que muchas cosas en los libros tradicionales de lenguas extranjeras no son muy válidos. Muchas veces los textos son escritos a la punto de vista de un turista. **Los profesores** no quieren enseñar a sus estudiantes como ser turistas. **Los profesores** deben enseñar a comprender una cultura y lengua extranjera. (Student D)

<sup>5</sup> The production data presented here was taken from compositions written in two sections of an Advanced Spanish Composition course at a large university in the United States. All the learners were native speakers of English who had learned Spanish in a classroom setting.

'There are professors that do not believe literature to be important for a student in business or engineering. They believe that foreign language students should learn more practical things to function in other countries. I think that they do not understand that many things in traditional foreign language textbooks are not very valid. Often the texts are written for a tourist's perspective. The professor do not wish to teach their students how to be tourists. The professors should teach to understand the culture and the foreign language.'

Since the fragment's topic is *Tos profesores*, this fragment violates the null topic constraint. This overuse of overt pronouns is part of a larger problem. What in some students manifests itself as overuse of subject pronouns, in others might express itself as an overgeneralization of learners errors. While the majority of intermediate learners of Spanish overuse overt pronouns, a few systematically overuse the implicit subject pronouns, as shown in the samples below:

- (17) [discussing a poem by Gabriela Mistral] ...Los sentimientos de amor, dulzura y aspereza reflejan el amor de la mujer por el hombre. Ella quiere morir porque decide irse al otro mundo ya que quería unirse con el hombre y dios en otra vida. **Tiene** pocos elementos de misticismo. (Student A)  
 'The feelings of love, sweetness and harshness reflect the love of the woman towards the man. She wishes to die because she decided to go to the next world since she wanted to be reunited with the man and god in the next life. It has a few elements of mysticism.'
- (18) [answering a question about the grape boycott and the chicano community] La idea del boycott existe en el mundo de trabajo como una salida para los trabajadores. **Pueden** expresar sus sentimientos e ideas. El boycott ofrece compañía y el poder económico que da la compañía. (Student A)  
 'The idea of the boycott exists in the world of work as an alternative for workers. They can express their feelings and ideas. The boycott offers solidarity and the economic power that solidarity can give.'
- (19) [discussing a poem about slavery by Nicolás Guillén] ...El abuelo simboliza la vida de un esclavo que llegó a Hispanoamérica con los conquistadores. **Tuvieron** una vida dura que quedó reflejada en la descripción del abuelo Facundo. (Student A)<sup>6</sup>  
 'The grandfather symbolizes the life of a slave that arrived in Hispanoamérica with the conquistadores. They had a hard life which was reflected in the description of grandfather Facundo.'
- (20) [discussing the role of literature in foreign language teaching] .. La literatura de una cultura es como una heliografía de esta cultura. Los temas usualmente refle-

<sup>6</sup> This is not a frequent error. Of the 18 and 15 students in the two groups observed, only three exhibited this behavior, and all three were reasonably competent for their level.

jan las actitudes y la conducta de una sociedad. También, la literatura de una lengua puede exponer muchos dialectos diferentes y aumentar el vocabulario. Para investigar un asunto de un país extranjero, frecuentemente **tiene** que consultar textos en el idioma de este país para encontrar la información mejor. Por supuesto, **necesita** leer mucho para aprender a leer bien. ¿Qué **van** a leer en vez de literatura? (Student B)

‘The literature of a culture is like an heliography of such culture. The topics usually reflect the attitudes and conduct of a society. Also, the literature of a language can expose [someone] to many different dialects, and increase vocabulary. To conduct research on a foreign country, [one] frequently has to consult texts in the language of the country to find the best information. Of course, you need to read a lot to learn to read well. What will [they] read instead, of literature?’

In the above examples, the null subject of the bolded verbs are pragmatically odd because the content of the subject cannot be recovered from the utterance context. In (14) the use of the null pronoun is anomalous because its referent is ‘the poem’, while all the previous sentences have ‘the woman’ as a topic. Similarly, the null subjects in (15)-(17) are perceived as odd because they are used at the same time the discourse topic is shifting, thus violating the discourse coherence constraint. Diaz-Rodriguez and Licerias (1990) identified even more striking patterns of subject drop in the interlanguage of Chinese learners of Spanish.

Both overuse and underuse of subject pronouns are not very obvious errors because the patterns of use are only anomalous within the context of discourse coherence and not at the sentence level. Often dismissed as ‘poor writing skills’, these errors may be indicative of a lack of mastery of the semantic and pragmatic principles that regulate the overt/null subject pronoun alternation in Spanish. If so, error correction focused directly on a surface construction (such as incorrect use of *lo* as subject pronoun) may be used by learners to edit their speech, but the underlying factors that cause it may not be addressed. Alkasey and Pérez-Leroux concluded a substantial amount of language experience was required before pronoun use matched that of native speakers. This concurs with the findings by Licerias (1988), which show that although most L2 learners of Spanish possess stylistic knowledge associated with the null subject parameter, some fail to give evidence of such knowledge.

The view that intermediate learners of Spanish have not switched to a null subject grammar can explain the errors well, but fares poorly in accounting for the successes. It makes a very straightforward, but basically incorrect prediction: that non-advanced speakers should be avoiding null pronouns.

Is it possible that some Spanish L2 speakers are able to use null pronouns, but not use them well? Is it possible that their null subjects are some kind of strategy, artificially pasted into their interlanguage? One may imagine, following Clahsen (1988), that adult language learners only learn surface knowledge of structure, but not the internal properties. Strozer (1994) argues that knowledge of the semantics of null

pronouns should be unattainable to non-native learners, because these learners have matured beyond a critical period and cannot internalize subtle aspects of grammar the way children do. On the opposite side of the fence, one would contend that if the null subject parameter is resettable, then the associated pragmatic and semantic constraints are expected to surface in the grammar of the L2 learner. In the next section, we will present a study investigating precisely this question: are learners sensitive at all to semantic factors which govern the distribution of overt and null subject pronouns in Spanish? This study tests knowledge of the OPC constraint on the intermediate learners, where efforts are usually directed at correcting the various error patterns examined here.

## The Study

### Subjects

Fifty-one university-level students of Spanish constituted the subject pool.<sup>7</sup> All subjects were enrolled in advanced Spanish language courses at the time of data collection. This implies that they may have between three and five years of classroom experience. Sixteen subjects had studied abroad in a Spanish-speaking country. None of the subjects could be considered near native.

### Methods and Procedures

Participation in the project was voluntary and students were informed that it did not affect their course grade. Data were collected by the authors from intact groups during regular classtime. Following the administering of an informed consent form, the test was distributed. Subjects were asked to translate two sentences from English to Spanish after first reading two short stories in English that provided context for the sentences.<sup>8</sup> The stories and sentences are provided below.

- (18) Story A: Once when I was in high school, this kid in my class was telling us that he had secretly brought a gun to school. The teacher overheard this as she ap-

<sup>7</sup> Note that the original pool was comprised of 59 subjects. However, the data from four learners who self-identified as native speakers of Spanish were pulled. Additionally, the data from four other subjects were also pulled due to problems with their performance on the task: two subjects used first person quotations in their translations, one subject used an overt NP instead of subject pronouns, and one subject produced an ungrammatical construction by not inflecting the verbs 'copiarse' or 'traer'.

<sup>8</sup> Subjects were also asked to indicate if they had studied in a Spanish-speaking country, what previous secondary and university-level Spanish coursework they had, and if they were native speakers of Spanish.

proached the classroom, but didn't see who said it. Naturally she wanted to know who the kid was. So she asked:

(19) Who said he brought a gun?

In Spanish, this question can be asked with either a null subject (*¿Quién dijo que trajo una pistola?*) or an overt subject (*¿Quién dijo que él trajo una pistola?*) because the context of the story ensures an individual referent for the subject pronoun.

(20) Story B. Another time the teacher overheard some students talking about an exam. One student said "I was able to read my notes during the test." Another said "I even opened my book." Other voices added "I was cheating, too." The teacher stormed into the classroom and asked:

(21) Who said he cheated on the exam?

Story B, in contrast, strongly biases for a variable interpretation since the question refers to individuals saying something about themselves, and no unique referent for *he* is readily available. Thus, the acceptable Spanish translation would require a null pronoun: *¿Quién dijo que se copió en el examen?*

### *Scoring and Results*

If as predicted that if learners had begun to acquire OPC they would prefer a pattern of using overt pronouns in Story A (individual referent) and a null pronoun in Story B (which requires a bound variable interpretation). Thus, translations of the two sentences were classified according to their use of overt and null pronouns. Table 1 captures the number of learners and their use of pronouns for Stories A and B, respectively.

Table 1  
Numbers of learners by their answers to Story A and Story B

	Answered Null to Story A	Answered Overt to Story B
Answered Null to Story B	33	12
Answered Overt to Story B	4	6

As seen, the majority of subjects (30) used null pronouns in both conditions. While this is not incorrect, such usage yields no information about learners' knowledge of OPC restrictions. Another twelve subjects successfully distinguished between conditions and correctly used an overt pronoun in Story A and a null pronoun in Story B. Of

the remaining nine subjects, five used an overt pronoun in both stories —suggesting they have not acquired null subjects— while four others violated OPC by using an overt pronoun in Story B even when they had used a null pronoun in Story A.

A one sample sign test (Table 1) was performed on the data, comparing the null-null and overt-null groups to the overt-overt and null-overt groups. The results were found to be significant ( $P = .0001$ ). These findings suggest that some learners have knowledge of OPC. However, if one consider the disparity between the high number of subjects answering both stories with a null pronoun, it is possible that the inclusion of the null-null and overt-overt groups may mask the real comparison. As noted, while the use of a null pronoun in both stories is not incorrect, it is possible that (at least some of) these subjects may be overgeneralizing their use of the null pronoun rather than displaying a sensitivity to OPC constraints. Likewise, subjects who used an overt pronoun in both stories may have not acquired null subjects and consequently, OPC may be entirely irrelevant for their grammar. The interesting comparison takes place between the null-overt group (12 subjects) to the overt-null group (4). A one sample sign test approached significance in the expected direction ( $P = .0768$ ).

### *Discussion*

Our findings, though preliminary, clearly suggest that some learners at intermediate stages of instruction demonstrate a tendency to obey Montalbetti's constraint on overt pronouns, or OPC. That is, the learners which succeed at discriminating know that null pronouns are to be used when the subject has a bound variable interpretation, as when everybody admitted to having cheated on the exam. It is not surprising at all to find that there is a substantial group that does not discriminate. As Lipski (1997) points out, knowledge of the semantics of overt/null subject alternation is one of the most vulnerable aspects of the syntax of null subjects. In a study of transitional bilinguals, he found that the contrastive focus and variable binding aspects of the null/overt subject pronoun distinction was one of the element to undergo attrition from the transitional bilingual community of Spanish speakers. Lipski identified bilinguals who had rates of null subjects comparable to that of monolinguals but who had lost some of the specialized pragmatic and semantic functions of the null subject.

It is also important to underscore that OPC effects are very weak, and therefore difficult to assess experimentally. Additionally, OPC effects interact with the other pragmatic and stress factors which regulate the interpretation of pronouns (Solan 1983; Luján 1985; Luján 1986; Hirschberg and Ward 1991). Furthermore, we suspect that neither instructors or native speakers of Spanish are aware of OPC effects at a conscious level; it is an aspect of the grammar that is completely untutored. To find any sensitivity to it in the second language setting must be seen as an extremely positive and encouraging result. Therefore, we view the findings of the present study as preliminary evidence that adult learners of Spanish are able to use their language instinct, to borrow the words of Pinker (1994), in their acquisition of deep and subtle

properties of the grammar such as OPC. This finding is all the more surprising because of the additional evidence that many learners at similar point in development give no indication of having reset the parameter.

### **Conclusion**

It is not clear from this research how instruction can be modified in specific ways to accelerate development. Nor is it clear either that it should be modified. One possibility, yet to be explored, is that some of the triggers that have been proposed for child language, such as acquisition of the verbal inflectional paradigm, or of the status of expletive pronouns, can serve as the cue for the non-native learner. Evidence so far on the second language acquisition of English shows that acquisition of morphology does not correlate with acquisition of non pro-drop properties (Davies 1996). It may be that what is required to reset the pro-drop parameter is not a single factor, but rather a confluence of factors. It is also possible that such conditions are only met with considerable linguistic experience, as suggested by Alkasey and Pérez-Leroux. Recent research of near-native speakers of Spanish indicate that mastery of null pronoun use is indeed achieved by highly fluent non-natives (Pérez-Leroux and Glass 1997).

Nonetheless, the picture painted by our findings is optimistic: although many learners at an intermediate level produce consistent pronoun errors, even more provide evidence of having mastered the pragmatics and semantics of Spanish subject pronoun usage. Many learners eventually succeed in acquiring a type of knowledge that is neither taught nor corrected, and of which many of their instructors are not even aware. What could guide this knowledge, save the language instinct that some of us believe to be alive in adult learners?

Looking at the above picture, classroom teachers may see a half full or a half empty cup. They may wince at students who write “*lo es interesante que...*”, or who endlessly repeat their pronouns as in “*yo soy de Pennsylvania, yo vivo en un dormitorio, yo estudio español*”, and complain that the student who drops too many pronouns cannot maintain coherence in his writing. Alternatively, a quick view of the acquisition process may lead the classroom teacher to understand all these error patterns as a natural developments, and to acknowledge the limitations inherent in explicit grammatical instruction. This should not be taken to imply that instructional focus on form is useless. Rather, the decision on what aspect of the grammar to focus must take the global nature of the phenomena into consideration. Rutherford (1988) strongly argues against piecemeal instruction of global systems. In his critique of the piecemeal approach to teaching the English determiner system, he concludes that “entry into the system for the learner will not be through sets of rules, sequenced or not, but rather through cognitive correlates of the determiner system such as presupposition and raising-to-consciousness” (1988:234). In the case studied in this article, this would suggest that instructional efforts need not be limited to individual surface syntax, but could explore instead particular potential triggers for parameter resetting.



Every proposal for grammatical instruction must consider two questions: the what to teach, and the how to teach it. While it is not the purpose of this article to outline a pedagogical agenda, our research does have some implications. We believe it unlikely that metalinguistic explanations of the pro-drop parameter can be useful, given that research shows knowledge of rules to have little impact on proficiency (see Canale & Swain 1988 for a review). Approaches in which the phenomena is simply presented, with lower degrees of explicitness and elaboration, but where the attention of the learner is focused on the relevant structures, seem more promising in this case (Sharwood-Smith 1988). If it is correct that learners of Spanish have access to some knowledge of the null subject parameter, and can use their 'language instinct', the instructor's task is to facilitate their access to a trigger. Whether the trigger for adult learners can be a single aspect of the grammar, or awareness of the global nature of the system, remains a question for further research.

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