

# Syntax-Pragmatics Interface: Brazilian-Portuguese L2 Acquisition of English<sup>1</sup>

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## 1. Introduction

In language acquisition, a learner maps from an initial state to a language-specific final state; in so doing, the learner must integrate multiple modular subsystems of a language grammar. Syntax and pragmatics are two such components<sup>2</sup>. Results from first language (L1) acquisition, suggest that development of syntax takes place prior to development of pragmatics (Austin, Blume, Parkinson, Núñez del Prado, & Lust, 1996; Boser 1995; Brownell, Carroll, Rehak and Wingfield, 1992; Carroll 1983; Lust, et al 1986). Early results from adult second language (L2) similarly indicate the independent albeit related development of syntax and pragmatics and perhaps the primacy of syntax over pragmatics as well (Flynn 1983, 1987; Hertel 2003; Polio 1995; Pérez-Leroux and Glass, 1999.). Continued research, as suggested by Hopp (2004), indicate that “L2 learners have robust knowledge of underdetermined UG-specified syntax, but that they manifest non-target like behaviour in interpretive interface aspects [viz., the syntax-pragmatic interface] (p. 68) (see also Serratrice, Sorace & Paoli 2004; Serratrice 2005, Sorace 2005 for an alternative explanation concerning pragmatic deficiencies in early language).

Taken together, the L1 and L2 results suggest that in acquisition what on the surface might appear to be solely a syntactic deficit in a learner’s grammar might be more fully understood in terms of a lack of knowledge about pragmatics and the syntactic pragmatic interface (see e.g. Lardiere 2000 for similar arguments in other domains of acquisition). In this paper we report both the results of a previous study designed to investigate the L2 acquisition of the third person singular *object* pronouns (Pacheco, 2000) and also the preliminary results from an ongoing study that focuses on the L2 acquisition of the grammatical properties of English *subjects* and *objects* by adult speakers of Brazilian Portuguese (BP). We assume that L1 and L2 acquisition are guided by the same underlying linguistic principles. We also claim that learners develop the grammar of the L2 independently of the L1 grammar. However, learners’ grammatical knowledge of the L2 may be masked at points of interpretive interface. At these points, prior to the development of a complete understanding of the pragmatic constraints concerning for example, the deletion of nominal elements, the L2 learner may appear to fall back on known L1 allowable operations. This phase is developmentally transient; yet, its existence extends beyond the point at which the syntax of the L2 has been fundamentally established.

## 2. Focus of this paper

This paper presents preliminary results from an ongoing study that focuses on the L2 acquisition of overt and null *subjects* and *objects* in English by adult speakers of Brazilian Portuguese (BP). Specifically, we test whether the L1 pragmatic factors associated with the syntax of overt and null *subjects* and *objects*, particularly where deletion of these noun phrases is pragmatically controlled in

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<sup>2</sup> Sperber and Wilson 1986 argue that pragmatics cannot be a module “given the indeterminacy of the predictions it offers and the global knowledge it invokes (Horn and Ward 2003:1)

the L1 and not in the L2, can lead learners to produce and accept ungrammatical L2 sentences. We argue that these preliminary results provide evidence in support of the following:

- (1) The independence of the development of syntax and pragmatics.
- (2) The developmental primacy of fundamental syntax over pragmatics.<sup>3</sup>
- (3) And, “delay” in acquisition with respect to “interpretive interface aspects” [viz., the syntax-pragmatic interface] (Hopp 2004, p. 68).

In addition, we argue that in the absence of acquired knowledge about these “interpretive interface” conditions for the L2, the learner will rely upon L1 knowledge in a manner not observed in development of syntactic constraints.

### 3. Brazilian Portuguese Linguistic Facts

Unique to BP as a Romance pro-drop language, the use of null referential *subjects*, particularly with 1st person (singular and plural), and with 2nd person singular, is in decline (Duarte 1993, 1995). Duarte (1995) concludes that BP is becoming a non-pro-drop language with some remaining properties of the pro-drop languages. The following examples (from Duarte 1993, 1995) present the most relevant factors to this study (see an extensive discussion of these facts in Schwenter 2006 as well):

#### 3.1 Null subjects<sup>4</sup>

Null *subjects* are preferred with 3rd person singular (ex. 1). In other Romance languages, such as European Portuguese, a null *subject* is mandatory in this context.

- (1) *Ele<sub>i</sub> sentiu que ec<sub>i</sub> era o único ali novo.*  
*He<sub>i</sub> felt that ec<sub>i</sub> was the only there young.*  
 (‘He realized that he was the only young man there’.)

Null *subjects* are required in expletive environments (exs. 2 and 3), like other Romance languages.

- (2) *ec Parece que o João passou por aqui.*  
*ec Seems that the John passed around here.*  
 (‘It seems that John has passed around here’.)
- (3) *ec Choveu o dia todo.*  
*ec Rained the whole day.*  
 (‘It has rained the whole day’)

#### 3.2 Overt subjects

Overt *subjects* are preferred with first and second person singular (exs. 4 and 5), unlike other Romance languages.

- (4) *Eu acho muito engraçado quando eu lembro o modo que eu fui criada.*  
*I think very funny when I remember the way that I was educated.*  
 (‘I think it’s very funny when I remember the way I was brought up.’)

<sup>3</sup> This makes intuitive sense as the syntax must be in place, so to speak, before a learner or a speaker can begin to pragmatically manipulate it.

<sup>4</sup> In contrast to BP, *subjects* in English, in general, must be overt. However, there are a restricted number of contexts in which the null subject option is available: coordinated clauses, questions with an implied second person subject, progressive participle constructions and topic drop. For a more extensive discussion of these constructions see Haegeman (1997).

- (5) *O senhor* podia descrever o lugar onde *o senhor* mora?  
*The sir* could describe the place where *the sir* live?  
 ('*Sir*, could *you* describe the place where *you* live?')

### 3.3 Null objects<sup>5</sup>

With respect to the deletion of *object* position, Cyrino's studies (1993, 1994) strongly suggest that BP is not constrained by any grammatical property. The only operative constraints on the use of null versus overt *objects* in BP are the NP antecedent features, particularly [ $\pm$  human] and [ $\pm$  specific]. Cyrino (1994) concluded that null *objects* are more frequently used when the antecedent NP has the features [-animate; -specific] (See ex. 6, from Cyrino 1994, and Table 1):

- (6) João descascou a *banana*<sub>i</sub>, mas Pedro não comeu *ec*<sub>i</sub>.  
 João peeled *the banana*<sub>i</sub>, but Pedro did not eat *ec*<sub>i</sub>.  
 ('John has peeled *the banana*<sub>i</sub>, but Peter has not eaten *it*<sub>i</sub>).

**Table 1 Percentage of use of null *Objects* in BP (Cyrino, 1994)**

<i>Features of the antecedent</i>	<i>Object position</i>
[+animate, +specific]	0% deletion
[+animate, -specific]	57% deletion
[-animate, +specific]	86% deletion
[-animate, -specific]	93% deletion

### 3.4 Overt objects

According to Cyrino (1994), overt *objects* are the preferred choice when the antecedent NP has the features [+animate; +specific] (ex. 7, from Cyrino 1994):

- (7) Se você encontrar a *Maria*<sub>i</sub> novamente, convida *ela*<sub>i</sub> prá sair com a gente.  
 If you meet the *Maria*<sub>i</sub> again, invite *she*<sub>i</sub> to go out with us.  
 ('If you meet *Maria*<sub>i</sub> again, invite *her*<sub>i</sub> to go out with us').

## 4. Background: previous L2 research

Pacheco (2000) investigated the L2 acquisition of the pronominal *objects* *him*, *her* and *it* in English by Brazilian Portuguese learners with the purpose of finding evidences of interference from BP and the occurrence of patterns determined by universal strategies rather than L1 interference.

### 4.1 Experimental Design

Adult and adolescent learners studying English as a foreign language (EFL) in a private school participated in the study. The total number of Ss was 145. They were classified as being at one of four levels of EFL competence: beginner ( $n = 32$ ), basic ( $n = 22$ ), intermediate ( $n = 45$ ), advanced ( $n = 46$ ).

Two versions of a written production test were designed in order to elicit the 3<sup>rd</sup> person *object* pronouns. Version 1 (V1) was designed for beginners, basic and intermediate learners (Sentence 1 is an example). Version 2 (V2) was designed for advanced learners only. (Sentence 2 is an example). In both versions, students were instructed to complete the sentences using the targeted verb plus a modal (*will* or *can* for V1 and *would* or *could* for V2).

Sentence 1: If you meet Mary again, \_\_\_\_\_ (invite)

<sup>5</sup>In contrast to BP, *objects* are, in general, obligatory in English. There are, however, a few restricted contexts in English in which "backward" deletion of an *object* is allowed for example in a coordinated sentence structure [Mary cooks  $\emptyset$  and loves carrots.] or in *object topicalization* [Beans, I love  $\emptyset$ ].

Sentence 2: If you met Mary again, \_\_\_\_\_ (invite)

#### 4.2 Pacheco's results

Pacheco (2000) argues that some of her results support the L1 transfer hypothesis while others reveal the occurrence of patterns determined by universal strategies. Table 2 summarizes the deletion of the *object* position, according to the features of the antecedent, by BP native speakers (Cyrino, 1994) and by English L2 learners.

**Table 2 Percentage of use of null *objects* in BP (L1) and in English (L2)**

	<i>Features of the antecedent</i>			
	+anim, +spec	+anim, -spec	-anim, +spec	-anim, -spec
<i>Beginner</i>	54,8%	56,1%	50%	88,8%
<i>Basic</i>	28,5%	25,5%	40%	89,4%
<i>Intermediate</i>	2,2%	4,8%	11,1%	21,6%
<i>Advanced</i>	0%	5,6%	6,5%	22,5%
<i>BP</i>	0%	57%	86%	93%

(anim=animate; spec=specific)

Table 2 demonstrates that at the *Beginner* and *Basic* levels, the L2 learners delete the *object* when the antecedent has the features [-anim, -spec] to a considerable degree [88.8% and 89.4% respectively]<sup>6</sup> while intermediate and advanced learners avoid deletion when the antecedent has the features [+anim, +spec]. Pacheco argues, on the one hand, that the results for the *Beginner and Basic levels*, “transfer” from the L1 since similar patterns, with respect to the *object* deletion, are found in BP. On the other hand, Pacheco argues that the transfer hypothesis fails to explain the high frequency of null *objects* with [+anim, +specific] antecedents (54.8%) in the beginner level, since *object* deletions with this kind of antecedent is close to 0% in BP.

Particularly interesting to our present study, Pacheco (2000) noted that *intermediate* and *advanced* learners do not use any wrong pronominal forms in their L2 English; that is, these learners do not incorrectly use the genitive or nominative forms of pronouns in *object* position. These learners know that only the accusative pronominal forms are licensed in this position. Pacheco also reports that beginners incorrectly use these forms in less than 20% of their utterances. These results suggest that these L2 learners have already mastered the grammatical properties associated with the L2 *object*

<sup>6</sup>One reviewer notes that the Pacheco (2000) results at the *Beginner* level, for the three types of antecedents with the features (+anim, +spec; +anim, -spec; -anim, +spec) indicate that the learners delete these *objects* in English at a comparable rate ~50%, more or less. The reviewer argues, “These facts are compatible with a hypothesis according to which the learners hypothesize that the functional category D could be either overt or null in the L2 but have not identified a set of interpretable features that license the null. I find the claim that the L2 learners have mastered the grammatical properties associated with the L2 *object* position too strong since they have not been able to recognize that features such as +anim and +spec do not license a null D.”

In response to this proposal we argue the following: 1) We are proposing a model of acquisition that is developmental as supported in much L1 and L2 research (see several of these references noted above); we are not proposing a model in which the learner has represented a complete language specific grammar from the earliest stages of acquisition. Development of a language specific grammar involves a complex mapping process that takes place over time. Thus, we do not argue that the Pacheco 2000 results at the *Beginner* stage necessarily indicate complete knowledge of all aspects of the L2 grammar. However, as Pacheco notes and as we have indicated above, that even at the *Beginner* level, these learners indicate 80% accuracy in terms of their correct use of accusative pronouns in *object* position. 2) We agree with the reviewer with respect to the fact that at this early stage of development, the learners do not seem to have established which set of features, if any, can license a null *object* in English. 3) What we find interesting in these results, however, is that it is not the case that the L2 learner is simply unaware of the features or of their values. While the +anim, +spec; +anim, -spec, and -anim, +spec pattern somewhat alike at the *Beginner* level, the response rate for the -anim, -spec antecedent is quite different; it reflects a 88.8% deletion rate.

The results from the *Intermediate* and *Advanced* levels most strongly support the hypothesis that acquisition of the interpretive interface between syntax and pragmatics has a developmental trajectory that extends beyond the acquisition of either of these two individual components so to speak.

position. Therefore, we hypothesize that the deletion of the *object* position, at all levels, cannot be attributed to a lack of L2 grammatical knowledge about English per se. Rather, these findings suggest differential L2 development of syntactic and pragmatic knowledge of English. While these two aspects of a language are independent in some sense, as results such as these and others suggest, they are highly dependent upon each other. We hypothesize that the full and accurate realization of a language's possible allowable pragmatic operations necessitates that the syntax be represented at a certain level in order that the pragmatic operations be allowed to apply. In other words, without the syntax, there is nothing the pragmatic operations can apply to.

## 5. New ongoing study

Building upon Pacheco's results, the following study was designed to explicitly test the hypothesis that syntax and pragmatics develop differentially in adult L2 acquisition of English by L1 BP speakers. We test this hypothesis with respect to the use of overt and null *subjects* and *objects* in systematically varied syntactic structures in English. We seek to determine whether certain patterns of acquisition that might at first glance appear to reflect deficits in syntactic knowledge can be explained in a more principled manner. We seek to determine whether certain apparent "deficits" can be shown to follow from a lack of complete control of what Hopp (2004) refers to as the "interpretive interface" aspects of the language. In the case at hand, we focus on the match/mismatch between BP and English in terms of the use of null *subjects* and *objects*.

### 5.1 Experimental design

#### 5.1.1 Subjects

For this study, native L1 speakers of BP who are learning English as an L2 at multiple levels of proficiency are investigated. To date, eleven (11) adult college students have participated in this study. These Ss were classified as being at one of three levels of EFL competence: basic ( $n = 4$ ); intermediate ( $n = 4$ ), intermediate-advanced ( $n = 3$ ). These proficiency levels were established through the use of an adapted version of the TOEIC test: *Test of English for International Communication*. It consisted of 50 questions testing listening skills and 30 questions to test learners' grammatical knowledge of the L2.

#### 5.1.2 Experimental Tasks

In order to test whether learners, on the one hand, know the grammatical properties that constrain the deletion of *subjects* and *objects* in English, and, on the other hand, whether they know that in the L2 these grammatical positions, in contrast to their L1, are not pragmatically controlled, different types of syntactic structures are tested in three types of experimental tasks:

- (1) Grammaticality Judgment Task [+/- Pragmatic Context]
- (2) Interpretation Task [+/- Pragmatic Context]
- (3) Translation Task [+/- Pragmatic Context]

In this paper, we will focus only on the results of the grammaticality judgment task (+/-Pragmatic Context).

##### 5.1.2.1. The Grammaticality Judgment Task

The Grammaticality Judgment Task consists of two conditions. The first involves eliciting judgments of grammaticality on sentences within the [- Pragmatic Context] condition and the second involves eliciting judgments on sentences within the [+Pragmatic Context]. Within each of these two conditions, both grammatical and ungrammatical sentences are systematically varied. The [+/- Pragmatic Context] condition is varied in order to test whether learners' judgments can be affected by a pragmatic strategy allowed in their L1 that is, the deletion of a *subject* or an *object* when there is an appropriate context that allows recovery of the deleted argument. In order to provide a Pragmatic Context, the learners are presented with a short, appropriate scenario, as discussed in more detail

below and as exemplified in Table 5, before they are given a sentence structure to judge as grammatical or not. The sentences that they are asked to judge are varied in terms of the existence of null or overt *subject* or *object*. They also varied systematically, as discussed below, in terms of the syntactic properties of the sentence structures. The structures chosen reflected both match and mismatch properties between BP and English.

The Grammaticality Judgment Task [-Pragmatic Context] consists of 144 sentences divided into two equalized sentence batteries (72 sentences in each). Learners are given 20 minutes to complete each battery. The Grammaticality Judgment Task [+Pragmatic Context] is composed of a total of 48 sentences, 24 sentences in each sentence battery. The maximum amount of time allowed for completing each of these sentence batteries is 15 minutes. All sentences are controlled lexically and in terms of number of words (11-12 words) and syllables (16-18 syllables). There are two grammatical and two ungrammatical tokens for each sentence structure.

Before testing began, all Ss were tested on their knowledge of the lexical items used in the stimulus sentences. This was done in order to make certain that any differences that emerged in the results were due to the syntactic and pragmatic factors varied and not due to lack of knowledge of the lexical items. In addition, all Ss were given a pre-training in order to familiarize them with the demands of the experimental tasks themselves.

#### 5.1.2.2. Grammaticality Judgment Task [-Pragmatic Context]

The use of the Grammaticality Judgment Task [-Pragmatic Context] allows an evaluation of the following overall hypothesis: If learners development in the L2 is constrained by principles of Universal Grammar independent of the language specific properties of the L1 grammar then we would predict the following:

- i) Learners' performance on their grammaticality judgments should gradually improve as their grammatical competence in L2 English develops. If learners are applying general astructural strategies in constructing the L2 grammar, we would not expect to see changes in the rates of amount correct improve as a function of increased competency all else being equal.
- ii) Learners should provide evidence that they are sensitive to the differences with respect to the level of complexity in the syntactic structures tested. Again, if learners were applying general astructural strategies in the course of acquisition, we would not expect that they would necessarily differentiate the stimulus sentences in terms of subtle syntactic differences given that all the structures are controlled in terms of number of words and syllables as noted above. To test this hypothesis, sentence structures involving null and overt subjects in matrix and subordinate clauses will be investigated.
- iii) We should find evidence that indicates that the L2 learners have implicit knowledge concerning those syntactic configurations in English that demand for example, explicit *subjects* in contrast to what is licensed in BP. To test this hypothesis, sentence structures involving the expletives *it* and *there* in *subject* position will be tested.

The sentence structures used to test these general predictions in i-iii above are exemplified in Table 3 below.

**Table 3 Grammaticality Judgment Task [-Pragmatic Context] sentence structures**

<i>Sentence structures</i>	<i>Examples</i>
(1) Null/Overt <i>subject</i> in matrix clauses	The corrupt governor lives next to the mayor in New York.
(2) Null/Overt <i>subject</i> in subordinate clauses	The lawyer always answers the mayor when he is giving a speech.
(3) Expletives <i>It</i> and <i>There</i> in initial position	
(a) Weather expletive <i>It</i> in matrix clauses	It always snows in New York City in January and February.
(b) Expletive <i>There</i> in matrix clauses	There is a huge cathedral near the bus stop on Fifth Avenue.
(c) Expletive <i>It</i> in matrix clauses with the verb <i>seem</i> in sentence initial position	It seems that the professor enjoys the cold weather in Boston.

### 5.1.2.3. Grammaticality Judgment Task [+Pragmatic Context]

The Grammaticality Judgment Task [+Pragmatic Context] allows an evaluation of the following hypothesis: If there is a primacy of development for syntax over pragmatics in the development of L2 grammars, then in an investigation with respect to the syntax associated with the English overt and null *subjects* and *objects* by L1 BP learners of L2 English in +/-pragmatic contexts, we should find empirical evidence for the following:

i) Evidence for more accurate performance overall in the –pragmatic context when compared to results for the +pragmatic context. This hypothesis is tested with null and overt *subjects* in the sentences illustrated in Table 4 below. The presence of a +pragmatic context might lead learners to accept ungrammatical sentences in English, such as a null *subject* sentence, because this null argument could be interpreted in such a context in BP. For the same reason, the absence of a pragmatic context might lead learners to correctly reject ungrammatical null *subject* sentences.

**Table 4 The Grammaticality Judgment Task [-Pragmatic Context] vs. The Grammaticality Judgment Task [+Pragmatic Context]**

<i>Grammaticality Judgment Task [-Pragmatic Context]</i>	
<i>Sentence structures</i>	<i>Examples</i>
(1) Null/Overt <i>subject</i> in matrix clauses	* Has a full time position at the famous Harvard School of Law.
<i>Grammaticality Judgment Task [+Pragmatic Context]</i>	
(2) Null/Overt <i>subject</i> in matrix clauses	* The intelligent student studies at a public school in New York. Goes to school with an elderly woman on Mondays and Fridays.

ii) Within the +pragmatic condition, we would expect evidence for more accurate performance overall on grammatical sentences with overt *objects* vs. ungrammatical sentences with null *objects*. Such a result would indicate that a +pragmatic context may negatively influence learners' grammaticality judgments, overriding their knowledge about the grammatical properties associated with the English *objects*. This hypothesis is tested with null and overt *objects* in the sentences illustrated in Table 5 below.

**Table 5 Grammatical vs. ungrammatical sentences in the Grammatical Judgment Task [+Pragmatic Context]**

<i>Grammaticality Judgment Task [+Pragmatic Context]</i>	
<i>Sentence structures</i>	<i>Examples</i>
(3) Null/Overt <i>object</i> in matrix clauses: grammatical sentences	The young woman from New York City knows the French Canadian man. The lawyer meets him in a coffee shop every Monday after lunch.
(4) Null/Overt <i>object</i> in matrix clauses: ungrammatical sentences	* The young lady from a small town admires the famous country singer. The elderly woman usually sees on the streets in New York City.

## 6. Results

Results thus far indicate that the L2 learners at early stages of acquisition have knowledge with respect to the syntactic constraints underlying the use of overt and null *subjects* and *objects* in English even where these constraints differ from BP. In addition, these results also suggest that knowledge of the L2 pragmatics especially with respect to the syntactic-pragmatic interface is later learned. This pragmatic deficit in the L2 often masquerades as a syntactic deficit. Tables 6 and 7 below show the preliminary overall results for the two conditions - Pragmatic context and +Pragmatic context in the Grammaticality Judgment Task. We will discuss each of these results separately. Recall that for a sentence structure to be judged correctly, the learner correctly accepted a grammatical sentence as grammatical and correctly rejected an ungrammatical sentence as ungrammatical.

**Table 6 Percentage of correct answers for the Grammaticality Judgment Task [- Pragmatic Context]\***

<i>Grammaticality Judgment Task [- Pragmatic Context]</i>			
	<i>Sentence Structures</i>		
<i>L2 Proficiency Levels</i>	<i>Null/Overt subject in matrix clauses</i>	<i>Null/Overt subject in subordinate clauses</i>	<i>Expletives It/There in Initial Position</i>
Basic	78.1	51.0	66.7
Intermediate	84.4	62.0	77.1
Intermediate/advanced	95.6	75.0	88.9

\* The percentage of correct answers was computed considering both grammatical and ungrammatical sentences.

**Table 7 Percentage of correct answers for the Grammaticality Judgment Task [+ Pragmatic Context]**

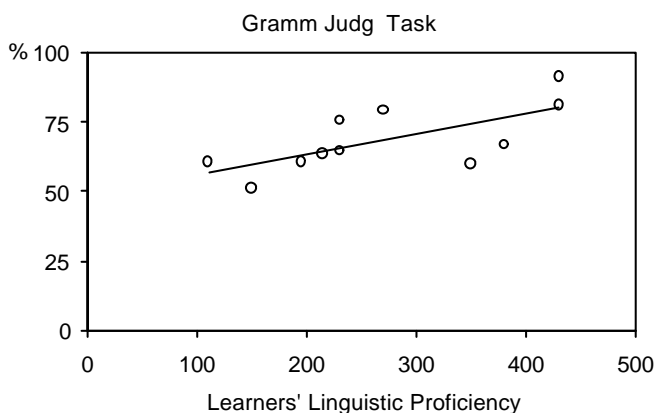
<i>Grammaticality Judgment Task [+ Pragmatic Context]</i>			
	<i>Sentence Structures</i>		
<i>L2 Proficiency Levels</i>	<i>Null/Overt subject in matrix clauses**</i>	<i>Null/Overt object in matrix clauses: grammatical sentences</i>	<i>Null/Overt object in matrix clauses: ungrammatical sentences</i>
Basic	70.3	90.6	40.6
Intermediate	78.1	90.6	56.2
Intermediate/advanced	83.3	87.5	83.3

\*\* For this structure, both grammatical and ungrammatical sentences were considered.

### 6.1 Learners' linguistic development

Overall, as shown in Figure 1 below, the percentage of correct answers correlated with the learners' linguistic proficiency. In other words, these results indicate linguistic development across the proficiency levels tested. The more proficient the learner is the more accurate the results are. As hypothesized, this pattern suggests that learners were not applying general learning strategies to the task; if this were the case, we would not expect to find differences in patterns of acquisition across proficiency levels.





**Figure 1: Percentage of correct answers in the grammaticality judgment tasks vs. learners' linguistic proficiency**

## 6.2. Learners' syntactic knowledge

We suggest that the following findings indicate that the L2 learners' have syntactic knowledge of English at early stages and that they are developing the L2 grammar independent of the syntactic properties of the L1. First, an overall comparison of the results on structures that involved only a single main clause vs. structures that involved a subordinate clause indicate that learners performed better on structures with a single main clause alone (See table 3 for examples). Given that the sentence structures were equalized in number of words and syllables and that learners were familiar with all the lexical items used in the experiments, this result suggests that the learners are differentiating the structures syntactically. As suggested above, this result also supports the conclusion that the learners are not simply applying a general astructural strategy to all sentences. This piece of evidence in turn contributes to the development of the argument that we are proposing here in that learners demonstrate early and syntactic knowledge of the L2 grammar.

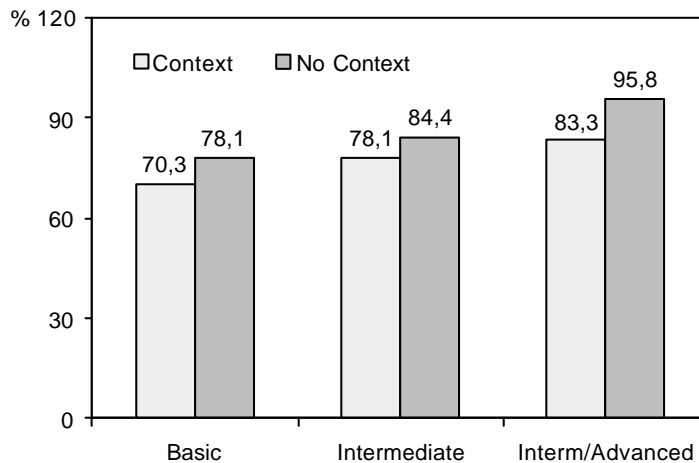
Second, in accordance with our initial prediction, figure 2 reveals that at all proficiency levels learners seem to know that English requires a pronoun in expletive environments. This finding reveals that the learners are developing their L2 grammars independently of their L1 grammars. If not, null subjects would prevail in these contexts since BP is like the other Romance languages in that a null subject must be used in English expletive environment. Yet, it is clear that these learners even at the earliest stages know that English is not BP in this respect.



**Figure 2: Percentage of correct answers with the expletives *It* and *There* in sentence initial position**

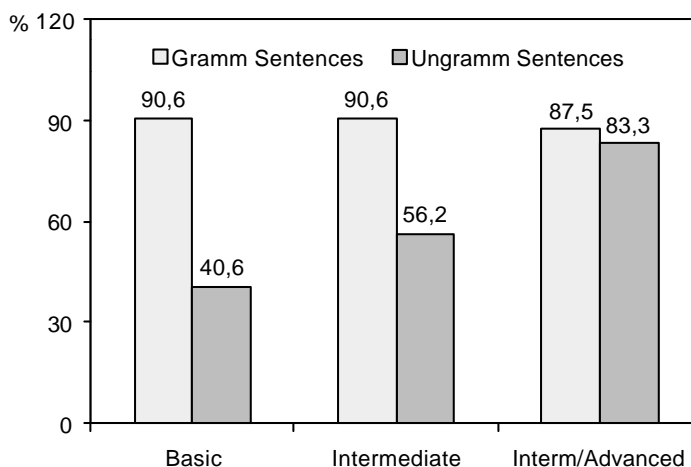
### 6.3. Learners' pragmatic knowledge

The following findings support our hypothesis that the L2 learners' grammatical knowledge develops in advance of the pragmatic knowledge. At all proficiency levels tested, the presence of a pragmatic context clearly affects learners' choices in terms of the acceptance of a null or an overt *subject* in a matrix clause (See table 4 for examples). Figure 3 indicates that learners tend to allow a null pronoun in contexts not licensed in English when there is a previously established pragmatic context that allows an interpretation of this null element, as would be the case in BP. For this reason, the L2 learners' scores are lower in the Grammaticality Judgment Task [+ Pragmatic Context] when compared to those for the –Pragmatic context. It is important to note, however, that while there is a depression in the amount correct in the +Pragmatic context condition, the depression is not major: 70.3 vs. 78.1; 78.1 vs. 84.4 and 83.3 vs. 95.8. It is also important to note that as in other results reported here, the L2 learners improve with development. In addition, we point out that even at the lowest proficiency level, the L2 learners are still able to judge correctly over 70% of the sentences as either grammatical or ungrammatical in the +Pragmatic context.



**Figure 3: Percentage of correct answers with the structure Null/Overt *Subject* in matrix clauses in the Grammaticality Judgment Task [- Pragmatic Context] vs. the same structure in the Grammaticality Judgment Task [+ Pragmatic Context].**

Figure 4 indicates that basic and intermediate learners are able to judge grammatical sentences as grammatical more accurately than they are able to judge ungrammatical sentences as ungrammatical. The grammatical sentences are those in which there is an overt *object* in a matrix clause. In the ungrammatical sentences there is a null *object* in a matrix clause (See examples in table 5). There are no effects of proficiency levels with respect to the grammatical sentences, that is, those sentences in which the *object* is overt. We argue that in this case the context does not interfere with the learners' judgments; as the *object* is overt, they do not need to rely on the context to interpret it. However, with the ungrammatical sentences, there is an effect of proficiency level, especially at basic and intermediate proficiency levels. The influence of the pragmatic context is much higher when the sentence is ungrammatical than when it is grammatical. This suggests that learners accept a null *object* because they "believe" that they can rely on the context to recover its meaning as in BP. This result, we argue, suggests that the learners can be influenced by a pragmatic strategy allowed in their L1 that leads them to accept L2 ungrammatical sentences. In the absence of complete knowledge of the interpretive interface conditions in the L2, learners resort to what they know about the L1 in these contexts. They do not know otherwise.



**Figure 4 Percentage of correct answers with the structure Null/Overt *object* in grammatical and ungrammatical matrix clauses in the Grammaticality Judgment Task [+Pragmatic Context].**

## 7. Preliminary conclusions

The preliminary results of this ongoing study confirm our main prediction that certain syntactic errors in a learner's grammar may be more accurately explained in terms of a lack of knowledge about pragmatics and the syntax-pragmatic interface rather than as syntactic deficits per se. The results thus far indicate that learners' grammatical knowledge improves as their L2 linguistic proficiency increases. In addition, at all three ESL proficiency levels reported in this study, we found evidence for syntactic knowledge of the L2 independent of the L1. The results thus far indicate high percentages of correct answers with sentence structures specifically designed to test learners' knowledge of the grammatical properties associated with English *subjects* and *objects*. However, as hypothesized, learners' grammatical knowledge of these properties may be masked when the antecedent of a null argument, especially in *object* position, can be recovered in the pragmatic context. To conclude, we argue that these preliminary results provide important new evidence concerning the primacy of syntax over pragmatics in L2 development. These results also very importantly provide new insights concerning both the development of pragmatic knowledge and subsequently how this knowledge interfaces with syntactic processes. Results here suggest the development of this component of the L2 grammar though related to syntactic development is also distinctly guided. This research continues with increased number of Ss as well as with expanded experimental tasks.

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