1. INTRODUCTION

In the last decade, UG-oriented L2 acquisition theory has focused its attention on the acquisition and development of functional categories in the L2 grammar. The debate has centered on the issue of whether functional categories are present or not at the initial stages of L2 acquisition. Vainника and Young-Scholten (1996) have proposed that functional projections are not present at the earlier stages of L2 acquisition. Eubank (1993/4) has proposed that they are present at early stages but are underspecified in features. On the other hand, Schwartz and Sprouse (1996) have proposed that functional features are fully specified as in the L1 in the earlier stages of L2 acquisition, and are reset at later stages of acquisition through access to UG. More recently, the "failed features hypothesis" (Hawkins and Yuet-hun Chan 1997) proposes that functional features are not accessible in L2 acquisition, although there are alternative mechanisms that allow L2 grammars to conform to UG principles.

In this exploratory study, two additional factors are introduced into this debate: the role that input has in the specification of interpretable features in functional categories and the relationship that these interpretable features have with discourse-related notions such as Topic.

Since the work of Corder (1967), the role of input and intake in L2 acquisition has been crucial to L2 acquisition theory. In UG-SLA theories that propose a role for UG and a role for transfer from the L1, the implicit assumption has been that the input received by the acquirer is consistently produced by native speakers of the target language. L2 acquisition, however, may take place in complex environments such as language contact situations in which there is language shift from a minority to a majority language. As noted by Muysken (1984) for the case of Andean Spanish, it may take place in
contexts that contain substantial amounts of naturalistic input in native and non-native varieties of the target or majority language (Spanish) as well as input in the first or minority language (Quechua).

As language shift affects society, the majority language is acquired by younger generations as an L1. In this type of contexts, first language acquisition also takes place under exposure to native and non-native input in the majority language. At the same time, input in the minority language decreases substantially and in some cases it is reduced to isolated words or basic vocabulary. As variability in exposure to input may have an impact on parametric variation in the feature specification of functional categories, it needs to be taken into account when describing and comparing L2 and L1 acquisition of functional categories in contact situations.

Another very important factor in studying the L2 acquisition of functional categories is the interpretation of their features. For Romance languages, interpretable features of functional categories such as pronominal elements and object agreement markers or clitics have been shown to be related to constituents situated in the left periphery of the clausal structure and traditionally analyzed as topicalized or focalized constituents (Cinque 1990, Rizzi 1996, Zubizarreta 1998). The interpretation of these functional categories in relation to discourse-related constituents needs also to be incorporated to the debate on the acquisition of functional categories in L2 acquisition.

In this paper, I will present an exploratory study of the L1 and L2 acquisition of interpretable features related to two functional categories, AgrO\(^0\) and D\(^0\), for two groups of children. The first group is formed by children who are L1 acquirers of Spanish and receive input in native and non-native Spanish. They receive very little or no input in Quechua. The second group is composed of children who are L2/Bilingual acquirers of Spanish and receive input mostly in Quechua and in non-native Spanish, and to a lesser extent in native Spanish.

The study uncovers evidence that, although there is an apparent similarity in the distribution of contexts in which the features inserted under the two functional projections are spelled out in the L1 and L2/Bilingual grammars, their interpretations differ according to their relationship to the topic of the sentence. I will propose that functional features are active both in the L1 and the L2/Bilingual varieties in this language contact situation, but are constrained by different spell-out conditions related to the topic of the sentence. Furthermore, I will explore the idea that this distinction is due to differences in the linguistic input available to the acquirers.
2. INTERPRETABLE FEATURES AND FUNCTIONAL PROJECTIONS

One of the morphosyntactic phenomena subject to a wider range of variation in Spanish is the configuration of the direct object pronominal system. There is regional variation in the preference for structures in which pronominal forms are involved. Thus, the answers (2) -(6) to the question in (1) may vary among dialects according to the information structure of the sentence:

(1) ¿Quiere el niño al sapito?
Loves the kid to-the frog
'Does the kid love the little frog?'

(2) Sí, lo/le quiere.²
Yes, CL loves
'Yes, (s/he) loves him'

(3) Sí, al sapito le/lo quiere.
Yes, the frog CL loves
Yes, (s/he) loves the frog.

(4)a. Sí, lo/le quiere a él.
Yes, CL loves to him
'Yes, (s/he) loves him'

(4)b. Sí, lo/le quiere al sapito.
Yes, CL loves the little frog
'Yes, (s/he) loves him'

(5) Sí, mucho ∅ quiere.
Yes, lots ∅ loves
'Yes, (s/he) loves (him)'

(6) Sí, al sapito quiere.
Yes, the frog loves
'Yes, (s/he) loves the frog'

In fact, in certain varieties of Spanish only sentences containing a direct object pronominal clitic such as (2), a clitic left dislocation structure (CLLD) such as (3) or a strong pronoun doubled by a clitic as in (4)a. are grammatical.¹
Sentences containing a DP doubled by a clitic such as (4)b., a null definite pronoun such as (5) or a fronted definite DP in a topic structure without a clitic such as (6) are ungrammatical for many native speakers of Spanish. However, to speakers of L1 and L2/ Bilingual Andean Spanish in Peru, sentences (4)b., (5) and (6) have been reported to be grammatical (Escobar 1994). These speakers live in areas where there is language contact and language shift from Quechua to Spanish.

2.1. Clitics as phi-features under AgrO$^0$ and D$^0$

There have been many proposals to account for the coexistence in Spanish, on the one hand, of clitic and clitic left dislocation structures, common to most Romance languages, and, on the other hand, of clitic doubling structures such as the one in (4)a., obligatory in all Spanish dialects and (4)b., possible in several Spanish dialects (Jaeggli 1986, Suñer 1988, Franco 1993). Traditional accounts of Romance clitic syntax have proposed that clitics are heads generated in object position. They move to V$^0$ and adjoin to the verb. (Kayne 1991):

(7) Je le vois ti.  
I CL see t_i  
'I see him'

For Spanish, alternative accounts have been proposed to account for the grammaticality of (4)b. In those accounts, it follows from clitics being base-generated in preverbal position. They absorb accusative case (Jaeggli 1986) and there is a PRO in object position, as shown in (8), and an NP in a non-argumental position preceded by a preposition, as shown in (9).

(8) Lo vi ∅.  
CL saw PRO  
'I saw him'  

(9) Lo vi a mi amigo.  
CL saw to my friend  
'I saw my friend'

The need for a preposition is confirmed by the ungrammaticality in most Spanish dialects of structures with no preposition and an indefinite NP object such as:
(10)  *Lo vi un libro.
    CL saw a book
    'I saw a book'

Nevertheless, as noted by Luján 1987, (11) is possible in Andean Spanish:

(11)  Se lo llevó una caja.
    CL CL took a box
    '(S/he) took a box'

The existence of varieties of Spanish such as Andean Spanish in which clitic doubling can occur with indefinite NPs supports the idea that clitics are morphological agreement markers that share features with a DP in object position (Suñer 1988, Franco 1993, Everett 1996). If clitics are indeed object agreement markers, they are still characterized by carrying in most varieties information on definiteness and specificity that is usually related to Determiners.

In order to account for the apparent dual nature of clitics as elements related to D⁰ and to AgrO⁰, Everett (1996) presented a unified morphosyntactic analysis of pronominal forms in terms of phi-features. Everett’s proposal tries to account for the wide range of variation across languages in structures involving pronominal, clitic and agreement forms. He proposes that this variation can be accounted for as a result of parametrization in the spell-out conditions for interpretable features under two functional projections: AgrO⁰ and D⁰. Pronouns as well as clitics and object agreement markers can be treated as bundles of interpretable phi-features (Chomsky 1995, Uriagereka 1995) that are inserted under D⁰ or AgrO⁰.

Everett proposes that languages may vary according to the conditions applying to the insertion and spell out of these phi-features. Thus, he postulates that in some languages, spell out must take place only in non-theta related positions such as AgrO⁰, yielding structures with clitics or agreement markers only, whereas in other languages it must take place in theta-related positions such as the D⁰ in object position yielding languages with strong pronouns. Finally, Everett considers a third logical possibility: spell-out takes place in both positions, yielding clitic doubling structures with a strong pronoun. Notice that in the case of doubling of a DP, spell out of the features under D⁰ does not preclude the presence of an NP as a complement of D⁰. This possibility is subject to parametric variation according to restrictions on the interpretable features of the D⁰ head of the doubled element, such as definiteness or specificity. In Everett’s analysis, clitic left dislocation structures also involve spell out under D⁰ and AgrO⁰.
In previous work (Camacho, Sanchez and Paredes 1996, Sanchez 1998), I have proposed that in sentences such as (5) a pronominal element that is phonetically null appears in object position in Andean Spanish. This adds a fourth possibility to Everett’s proposal, which is no spell-out under either AgrO\(^0\) or D\(^0\). Finally, this proposal can be extended to cases of topicalization, exemplified in (6). Regardless of whether topicalization involves movement or not, in structures that involve a fronted topic there is no spell out under AgrO\(^0\). All the possibilities are shown in (12):

(12)  a. Spell-out of features under AgrO\(^0\) (clitics).

b. Spell-out of features under D\(^0\) (strong pronouns, topicalization).

c. Spell-out of features under AgrO\(^0\) and D\(^0\) (clitic doubling structures, clitic left dislocation structures).

d. No spell out of features under AgrO\(^0\) nor D\(^0\) (null pronouns).

In this paper, I will attempt to uncover the syntactic conditions that determine the distribution of these spell out possibilities in an L1 and an L2/Bilingual grammar.

2.2. The spell out of interpretable features in Quechua

As Andean Spanish is a contact variety, it is necessary to mention the spell out possibilities for direct object pronominals in the language with which it is in contact. All varieties of Quechua allow for strong or null object pronouns and topicalization through fronting and lack a third person object agreement marker or clitic and therefore they lack clitic doubling and clitic left-dislocation constructions. The variety of Quechua spoken by the bilingual children in this study is Lamista Quechua, spoken in the Eastern slopes of the Andes in the province of Lamas, department of San Martin in Peru. Examples from Lamista Quechua are shown in Table 1:
Table 1. Third person direct object pronominal system in Lamista Quechua

<table>
<thead>
<tr>
<th>Phi-features</th>
<th>Examples</th>
</tr>
</thead>
</table>
| I. Under D\(\theta\) (DP in object position) | Huwan \([DP \text{ pay-ta}]\) maka-\(\emptyset\)- n.  
Juan \([DP \text{ pron-ace}]\) hit-\(\emptyset\)- 3ps  
'Juan hits him/her' |
| II. No spell out | Huwan \([DP \emptyset]\) \([AgrOP \text{ maka-} \emptyset\]- n.)  
Juan \([DP \emptyset]\) \([AgrOP \text{ hit-} \emptyset\]- 3ps]  
'Juan hits him' |
| III. Under D\(\theta\) (DP in Topic position) | \([DP \text{ Pay-ta-ka}]\) \([AgrOP \text{ maka-yka-} \emptyset\]- n.)  
\([DP \text{ He/She-acc-top}]\) \([AgrOP \text{ hit-durative-} \emptyset\]-3p]  
'S/he is hitting him/her' |

In this respect, Lamista Quechua presents a more limited set of spell out possibilities than Spanish. In a contact situation, given exposure to input in native and non-native varieties of Spanish, we expect that L1 and L2 Spanish would present a wider range of possibilities than Quechua.

3. THE FOCUS OF THE STUDY

Two questions emerge about the distribution of interpretable features in L1 and L2 varieties of Spanish in a contact situation. These are:

1) What are the conditions for spell out of interpretable features in the L1 and the L2/ Bilingual Andean Spanish grammars?
2) If they differ, what is the role of input in determining this difference?

If the conditions for spell out are more similar to those of Lamista Quechua in L2/Bilingual Spanish acquisition than in L1 Spanish acquisition, we expect the L2/Bilingual variety to exhibit strong and null pronouns as well as topicalization structures and to a lesser extent clitic, clitic doubling and clitic left dislocation structures. L1 acquirers, on the other hand, would exhibit the opposite pattern. It is also possible to think that, rather than exhibiting differences in the availability of the spell out possibilities enunciated in (12) a-d, the L2/Bilingual variety and the L1 variety would differ in the interpretation of these spell out possibilities.

In order to provide an answer to the first question, we will examine elicited production data and acceptability judgments from L1, L2 and Bilingual Andean Spanish speakers. In order to explore the role that input has in generating
differences in the spell out conditions for interpretable features, we determined patterns of exposure to input for the two groups under study.

4. METHODS

4.1. The subjects

The study involved production data by children, ages 9-12, in 4th, 5th and 6th grade of elementary school. The first group was composed of 42 children who are L1 Spanish speakers and have limited exposure to Quechua but at least one of their parents speaks Quechua. Four of them admit to knowing some basic vocabulary in Quechua but being unable to speak fluently or to understand the language. These children live in an urban area in the city of Lima, the capital of Peru, which is mostly a Spanish-only speaking environment. The average age of the children is 10.2. 17 of them (40%) are boys and 25 (60%) are female. They receive their education only in Spanish. Table 3 shows the distribution of children.

Table 2. L1 Spanish children San Juan de Miraflores, Lima, Peru

<table>
<thead>
<tr>
<th>Grade</th>
<th>L1=S, Q = 0</th>
<th>L1=S, Q words</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4º</td>
<td>12</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>5º</td>
<td>16</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>6º</td>
<td>10</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>4</td>
<td>42</td>
</tr>
</tbody>
</table>

The second group was composed of 28 children who receive input in Quechua and in native and non-native varieties of Spanish. For 15 of them Spanish is clearly a second language. Thirteen of them declared to have had very early exposure to Spanish and later exposure to Quechua. All of them live in a rural area where both Quechua and Spanish are spoken. Their average age was 11.4. 16 of them (57%) are male and 12 (43%), female. All of them receive education in both languages. Table 3 shows the distribution of the L2/Bilingual children.
In order to determine the sources of input available to the children at home, standard family patterns were formed. The following patterns emerged for both groups:

**Table 4. Sources of language input at home for L1 Spanish children**

<table>
<thead>
<tr>
<th>Family description</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard family pattern</td>
<td></td>
</tr>
<tr>
<td>The child has a father, a mother and siblings. At least one parent speaks Quechua. Siblings speak only in Spanish.</td>
<td>14 (33.33%)</td>
</tr>
<tr>
<td>Other family patterns</td>
<td></td>
</tr>
<tr>
<td>One parent or caretaker speaks Quechua.</td>
<td>28 (66.66%)</td>
</tr>
<tr>
<td>Total</td>
<td>42 (100.00%)</td>
</tr>
</tbody>
</table>

**Table 5. Sources of language input at home L2/Bilingual Spanish Children**

<table>
<thead>
<tr>
<th>Family description</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family pattern</td>
<td></td>
</tr>
<tr>
<td>The child has a father, a mother, grandparents, and siblings who speak Quechua.</td>
<td>14 (53.85%)</td>
</tr>
<tr>
<td>Other patterns</td>
<td></td>
</tr>
<tr>
<td>Some of the children's relatives speak Quechua at home.</td>
<td>12 (46.15%)</td>
</tr>
<tr>
<td>Total</td>
<td>26 (100.00%)</td>
</tr>
</tbody>
</table>
In the case of L1 Spanish-speaking children, most of the parents who speak Quechua at home use this language to address other adults (visiting relatives or friends), but rarely to address the children. Most parents of L2/Bilingual children who speak Quechua address their children in this language.

4.1. Data collection

Data collection included a story telling task and a picture-sentence matching task. Story telling was elicited through a series of 17 pictures based on Mayer's frog stories. The pictures portray four characters (a child, a dog, two frogs and a turtle). 12 of them contain at least one event that could be described using a transitive verb. The main purpose of this task was to elicit sentences containing transitive verbs and direct object complements for which the antecedents are the characters in the pictures.

In order to obtain acceptability judgements, a picture-sentence matching task was used. The children were asked twelve questions using a questionnaire containing 11 of the pictures used in the story-telling task. The children were shown the pictures, and after seeing each picture they were asked a question containing an overt DP and were asked to choose between a pair of possible answers to the question. These presented a couple of the spell out possibilities in (12). The children could read the question and the answers but in all cases the questions and the answers were read out loud by the interviewers. The options presented to the children appear in the Appendix. The purpose of this task was to obtain the children’s preference for one of the two structures that appeared in the answers and, at the same time, to control for the antecedent which in all questions was an overt DP.

The picture-sentence matching task was performed immediately after narration of the story. Both tasks were performed in individual interviews conducted by five research assistants and by the author at an elementary school of a rural area in Lamas, Peru and at an urban school in San Juan de Miraflores, Lima, Peru.

4.2. Coding and analysis of stories

The stories were recorded in a portable tape-recorder and transcribed using the CHILDES format. They were analyzed using the following criteria: sentences with transitive verbs were identified and classified as containing the following structures: clitic (example 2), clitic left dislocation (example 3), clitic doubling with a strong pronoun (example 4a.), clitic doubling with a DP (example 4b.), null pronoun (example 5) and topicalization (example 6). In addition to these structures, other structures involving a direct object complement were found in
the stories such as structures containing a DP, a strong pronoun or a CP in object position. The following examples illustrate these cases:

(14) El niño mira al/un sapito  (DP structure)  
    The boy looks to-the/a frog-diminutive
    'The boy looks at the/a little frog

(15) El niño mira (a) él/ eso / ése (Strong Pronoun)
    The boy looks (to) him /that / that one
    'The boy looks at him/that one'
(16) El niño piensa que se van (CP)
The boy thinks that (they) leave
'The boy thinks that they leave'

In some cases, the utterance of a sentence was incomplete or truncated and the sentence could not be properly identified as any of the structures previously mentioned. These sentences were classified as incomplete or not identifiable.

The antecedents of the direct objects contained in the analyzed sentences were classified according to whether they were identifiable in the child's previous discourse or not. If the antecedents were identifiable in the previous oral discourse, they were classified according to the type of direct object structure in which they appeared (see examples (2)-(6) and (14)-(16)). If they were identifiable in the pictures but were not present in the oral discourse, they were classified as not mentioned. Finally, if there was ambiguity in determining an antecedent or it was not possible at all to determine the antecedent in the oral discourse or in the pictures, it was classified as not identifiable.

5. RESULTS

The results of the story telling task are presented in Table 6. This table shows the number and percentage of sentences containing transitive verbs found in the L1 and L2 /Bilingual stories according to the type of direct object complement. Both groups of stories showed structures associated to the spell out of AgrO and D common to standard varieties of Spanish such as DPs, CPs, clitics, clitic doubling of a strong pronoun, and clitic left dislocation. At the same time, both groups present forms that have been identified as characteristic to Andean Spanish such as clitic doubling with DPs, null pronouns and topicalization with indefinite antecedents. They differ, however, in the frequency of appearance. In fact the distributions for both groups differ significantly, as shown by the chi-test results. The structures that contribute the most to this difference in distribution are the CP complements, which are significantly less frequent in L2/ Bilingual Spanish, and null pronouns and topicalizations, which are more frequent in the L2/ Bilingual Spanish stories.
Table 6. Distribution of direct objects forms according to syntactic structure

<table>
<thead>
<tr>
<th>Structure</th>
<th>L1 Spanish (San Juan)</th>
<th>L2/ Bilingual Spanish (Lamas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>186 (29.57%)</td>
<td>195 (31.25%)</td>
</tr>
<tr>
<td>Clitic</td>
<td>182 (28.93%)</td>
<td>144 (23.08%)</td>
</tr>
<tr>
<td>Clitic Doubling + DP</td>
<td>135 (21.46%)</td>
<td>144 (23.08%)</td>
</tr>
<tr>
<td>Clitic left dislocation</td>
<td>8 (1.27%)</td>
<td>9 (1.44%)</td>
</tr>
<tr>
<td>CP</td>
<td>57 (9.06%)</td>
<td>6 (0.96%)</td>
</tr>
<tr>
<td>Null pronoun (definite and indefinite antecedents)</td>
<td>32 (5.09%)</td>
<td>79 (12.66%)</td>
</tr>
<tr>
<td>Topicalization (definite and indefinite antecedents)</td>
<td>3 (0.48%)</td>
<td>21 (3.37%)</td>
</tr>
<tr>
<td>Strong Pronoun</td>
<td>7 (1.12%)</td>
<td>5 (0.80%)</td>
</tr>
<tr>
<td>Clitic Doubling + CP</td>
<td>1 (0.16%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>Clitic Doubling + Strong Pronoun</td>
<td>5 (0.79%)</td>
<td>3 (0.48%)</td>
</tr>
<tr>
<td>Incomplete or not identified</td>
<td>13 (2.07%)</td>
<td>18 (2.88%)</td>
</tr>
<tr>
<td>Verbs total</td>
<td>629 (100.00%)</td>
<td>624 (100.00%)</td>
</tr>
</tbody>
</table>

Chi test p<1.8x10^-13

In fact, if we exclude the structures that differentiate the L1 and L2/Bilingual varieties such as CP, null pronouns and topicalization, the chi-test result is p=0.379 indicating a similarity between the distributions of the other structures for the two groups. This indicates that the three structures mentioned above have a different distribution in L1 and L2/Bilingual stories.

The antecedents of the direct object forms in these sentences behave differently in the stories of both groups. Table 7 shows significant differences between the distribution of antecedents for null pronouns in the L1 and the L2/Bilingual stories. Null pronouns are more frequent in the stories of L2/Bilingual speakers when the antecedent is not mentioned but is recoverable from the pictures, indicating a deictic use of the null pronoun. They are also frequent when the antecedent is a DP indicating an anaphoric use of the null pronoun. Thus, in the L2/Bilingual grammar the null element clearly functions as a pronoun and not as a variable, as proposed by Camacho, Paredes and Sanchez (1996) and Sanchez (1998). Null pronouns are also present in the elicited production of L1 speakers, but they appear more frequently with antecedents that cannot be identified and only 6.25% of them have an antecedent not mentioned but recoverable from the pictures. Thus, their deictic nature is not as frequent as
in the case of the L2/Bilingual grammar. In 18.75% of cases, they refer to a DP previously mentioned indicating some anaphoric use.

Table 7. Distribution of null pronoun structures according to their antecedent

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>L1 Spanish</th>
<th>L2 / Bilingual Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP (definite or specific)</td>
<td>6 (18.75%)</td>
<td>25 (31.65%)</td>
</tr>
<tr>
<td>Clitic doubling +DP</td>
<td>0 (0.00%)</td>
<td>1 (1.27%)</td>
</tr>
<tr>
<td>Not mentioned</td>
<td>2 (6.25%)</td>
<td>37 (46.84%)</td>
</tr>
<tr>
<td>Not identifiable</td>
<td>23 (71.88%)</td>
<td>16 (20.26%)</td>
</tr>
<tr>
<td>CP</td>
<td>1 (3.13%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32 (100.00%)</td>
<td>79 (100.00%)</td>
</tr>
</tbody>
</table>

Chi-test p<5.2427E-06

Also revealing is the distribution of clitic doubling structures according to their antecedent. Clitic doubling structures have full DPs as their antecedents in the stories of both groups, but there is an important difference between the L1 group and the L2/Bilingual group with respect to the possibility of having clitic or a clitic doubling structure as an antecedent. The latter is more frequent in the stories of the L2/Bilingual group, as shown in Table 8:

Table 8. Distribution of clitic doubling (with a DP) structures according to their antecedent

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>L1 Spanish</th>
<th>L2/Bilingual Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>118 (87.41%)</td>
<td>107 (74.31%)</td>
</tr>
<tr>
<td>Clitic</td>
<td>3 (2.22%)</td>
<td>13 (9.03%)</td>
</tr>
<tr>
<td>Clitic Doubling +DP</td>
<td>0 (0.00%)</td>
<td>12 (8.33%)</td>
</tr>
<tr>
<td>Not identifiable</td>
<td>7 (5.18%)</td>
<td>5 (3.47%)</td>
</tr>
<tr>
<td>Not mentioned</td>
<td>5 (3.70%)</td>
<td>7 (4.86%)</td>
</tr>
<tr>
<td>FC</td>
<td>2 (1.48%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>135 (100.00%)</td>
<td>144 (100.00%)</td>
</tr>
</tbody>
</table>

Chi-test p=0.00027495

The results from the picture-sentence task are shown in tables 9a. and 9b. for the two groups. In all cases, the two options are answers to a question containing a definite and specific DP with the exception of items 5 and 11 which contained an indefinite but specific DP (see Appendix).
Items 2, 5, 9 and 11 opposed a sentence containing a null pronoun to a DP, a clitic, the doubling of a strong pronoun and the doubling of a DP respectively. In this task, L2/Bilinguals did not show a strong preference for the null pronoun over the other options. Items 4, 6, 7, 9, 10 and 12 opposed an answer containing some form of clitic doubling to one containing a DP or a strong pronoun.
L1 Spanish children showed preference for clitic doubling structures in items 4, 6 and 9. L2/Bilingual children showed this preference in items 6, 10 and 12. This was so despite the fact that L2/Bilingual children had very few instances of strong pronoun doubling in their stories. The low preference for null pronouns among L2/Bilingual children when opposed to overt DPs in the picture-sentence task contrasts with the distribution of structures with a DP antecedent in the story-telling task shown in table 10. The latter shows a higher percentage of null pronouns with DP antecedents in the L2/Bilingual stories. It should also be noted that L1 speakers also showed a strong preference for DPs over null pronouns in this task.

Table 10. Distribution of structures with a DP antecedent

<table>
<thead>
<tr>
<th>Structure</th>
<th>L1 Spanish</th>
<th>L2/Bilingual Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clitic</td>
<td>138 (38.66%)</td>
<td>102 (28.81%)</td>
</tr>
<tr>
<td>Doubling +DP</td>
<td>118 (33.05%)</td>
<td>107 (30.23%)</td>
</tr>
<tr>
<td>Null</td>
<td>6 (1.68%)</td>
<td>25 (7.06%)</td>
</tr>
<tr>
<td>Strong Pronoun</td>
<td>1 (0.28%)</td>
<td>4 (1.13%)</td>
</tr>
<tr>
<td>DP</td>
<td>92 (25.77%)</td>
<td>114 (32.20%)</td>
</tr>
<tr>
<td>Doubling +SP</td>
<td>2 (0.56%)</td>
<td>2 (0.56%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>357 (100.00%)</strong></td>
<td><strong>354 (100.00%)</strong></td>
</tr>
</tbody>
</table>

To summarize, the following picture emerges from the results of the two tasks. L2/Bilingual Spanish stories show a very low percentage of CP complements and a slightly higher percentage of null pronouns and topicalizations than L1 stories. With respect to the antecedents, L2/Bilingual Spanish stories show that null pronouns have as antecedents overt DPs and referents not mentioned in the narration but recoverable from the context, indicating anaphoric and deictic uses of the null pronoun. L1 Spanish stories also show null pronouns but their antecedents tend to be not identifiable in the story and have a very low frequency of not mentioned but identifiable antecedents. This makes it difficult to clearly identify anaphoric and deictic uses for this null pronoun. For both groups doubling structures with a DP may have as their antecedents overt DPs and clitic structures but it is only in L2/Bilingual stories that they have clitic doubling structures as their antecedents. The results from the picture-sentence matching task show a preference for doubling structures over other structures for L1 and L2/Bilingual children but a higher percentage of preference among L2/Bilingual children for doubling with a strong pronoun over a DP and for doubling with a DP over a specific DP.
6. AGRO\(^0\), D\(^0\) AND THE TOPIC STRUCTURE OF THE SENTENCE

As it was shown in the previous section, there is only an apparent similarity in the distribution of spell out possibilities for AgrO\(^0\) and D\(^0\) between the L1 and L2/Bilingual data. Differences in the type of antecedents for the structures analyzed point in the direction of a difference with respect to how these spell out possibilities relate to the information structure of the sentence. In particular with respect to the Topic of the sentence.

6.1. The Topic Phrase

Since the work of Rivero (1980) and in work by Cinque (1990) it has been widely accepted that in Romance languages clitic left dislocation structures involve a relationship between the clitic and the topic of a sentence. Rizzi (1997) has proposed that there is parametric variation across languages in the availability of clitics versus empty operators for Topic structures. Thus, while in English topic-comment structures involve a null anaphoric operator as shown in:

\[(13) \quad \text{Your book, [OP [I bought]}\]

in Romance languages the connection between the higher topic and a position internal to the IP is possible thanks to the availability of clitics. According to Rizzi, this makes possible structures with no quantificational force such as the one in (3) repeated here as (14).

\[(14) \quad \text{Sí, al sapito le/lo quiere.}\]

'Yes, the frog CL loves'

The relationship between an IP-external topic position and an IP-internal pronoun in object position has been related to the definiteness of the Topic in Spanish. Rivero (1980) has argued that clitic-left dislocation can occur with definite NPs but topicalization (with the exception of a limited number of verbs) is restricted to indefinite NPs as in:

\[(15) \quad \text{Libros, dicen que lee.}\]

'Books, the say (s/he) reads'
Notice that this contrasts with the L2/Bilingual Spanish data we presented that shows no sensitivity to definiteness for topicalization. That is, irrespectively of the definiteness of the fronted DP, there is a relationship between the spell out of pronominal interpretable features under AgrO and D and the topic structure of Spanish. Another argument in favor of relating interpretable features to a topic position is the fact that in Spanish clitics are incompatible with contrastive focus as shown by Zubizarreta (1998):

(16) Las ESPINACAS (*las) detestan los niños y no las papas.
    The spinach (* ACC.CL) hate the children and not the potatoes
    'The children hate spinach not potatoes'

Zubizarreta proposes that this is so because clitics are functional heads that project and have a \([+ \text{ topic}]\) DP in their specifier position and as such are incompatible with contrastive focus. An extension of the proposals that relate clitics in clitic left dislocation structures to DPs in a Topic position to all interpretable features overt and covert under AgrO⁰ and D⁰ could help us understand the differences in the distribution of syntactic structures according to their antecedents found between the L1 and L2/Bilingual Spanish data.

### 6.2. Clitic doubling structure and the topic structure

The following fragment from one of the L2/Bilingual stories shows the relationship between the spell out possibilities of interpretable features under AgrO⁰ and D⁰ and the Topic structure of the sentence.

(17)
*MEN: después vi
then I saw
después fue el sapo en una caja ahí.
then was the frog in a box there
y el perro le amaba al sapo.
and the dog caressed the frog
y era <el> el motelo @s \[\text{[:=q tortuga]}\] y el s(apo) # y
and was the the turtle and the frog and
el niño.
the boy.
*INT: uhum # ¿después?
uhum then?
*MEN: después el niño le amaba al sapo.
then the boy caressed the frog
In this fragment, the topic of the discourse is the little frog. This is established in the first sentence. In the second sentence the established topic is followed by a clitic structure:

(20)  y de la caja sacó una ranita
and from the box took a frog
When the child omits the clitic in the next sentence, a repair is needed to recover the topic in a clitic left dislocation structure. This one is followed by a clitic doubling structure and once the topic is restored the clitic structure is used again:

(22)  
[TopicXP e] Después el chiquito [AgrOj sacó ... ]
[TopicXP e] Then the little boy [AgrOj took ... ]

(23)  
[TopicXP e] A la rana pro [AgrO la, sacó de una caja]
[TopicXP e] To the frog pro [AgrO CL took from a box]

(24)  
[Topic XP e] Y el chiquito [AgrO lo, dejó ahí a la ranita]
[Topic XP e] And the little boy [AgrO CL left there the frog]

Thus, while the L2/Bilingual data indicates that clitic doubling is associated to fragments of discourse with the same topic, the L1 Spanish data shows a more intricate interplay of clitic and clitic doubling structures with the topic structure of the discourse.

6.2. Null pronouns and topic structure

The fact that null pronouns may refer to antecedents not present in the discourse but recoverable from the context in L2/Bilingual Spanish indicates that they behave as pronouns. More specifically, they are deictic and they may introduce a new topic in the discourse. This contrasts with their behavior in L1 Spanish as shown by examples (26) and (27) from the L2/ Bilingual Spanish and the L1 Spanish data respectively.
6.3 Spell out Conditions

Based on the higher frequency of clitic doubling with a clitic doubled antecedent and null pronouns with an identifiable antecedent in L2/Bilingual Spanish and on the analysis of the examples presented in sections 6.1 and 6.2, I would like to propose that there is parametric variation in the conditions for the spell out of interpretable features in L1 and L2/Bilingual Andean Spanish. This variation is related to the topic structure of the sentence and is restricted by the mapping of discourse referents onto the grammar. I am assuming that there might be cross-linguistic variation as to how this mapping takes place. For L2/Bilingual Spanish, I would like to propose the following conditions on the introduction of new topics and on maintaining the same topic throughout the discourse:

(28) New Topic Condition
If a new topic is introduced,
  a. Spell out the features under D₀, if a full DP (D₀ + NP) is projected.
  b. Optionally do not spell out D₀, if NP is not projected.
  c. Do not spell out the features under AgrO₀.

(29) Same Topic Condition
If the topic is the same,
  a. Spell out the features under AgrO₀ and D₀.
  b. Optionally do not spell out D₀, if AgrO₀ is spelled out.

Condition (28) allows for a full DP and a null pronoun to introduce a new topic and rules out a clitic structure or a clitic doubling structure as representations...
that introduce new topics. Condition (29) allows for clitic doubling and optionally for clitic structures to keep the same topic throughout discourse.

For L1 Spanish, the conditions vary in that there is no optionality in the spell out possibilities for D0. If a new topic is introduced, features under D0 must be spelled out. If the topic is the same, features under D0 must not be spelled out:

(30) New Topic Condition
If a new topic is introduced,
  a. Spell out D0, if a full DP (D0 + NP) is projected.
  b. Do not spell out the features under AgrO

(31) Same Topic Condition
If the topic is the same,
  a. Spell out the features under AgrO.
  b. Do not spell out the features under D0.

Condition (30) allows only for a full DP to introduce a new topic and rules out any construction involving a clitic as a representation that introduces a new topic. Condition (31) allows only for clitic constructions to keep the same topic throughout discourse.

7. CONCLUSIONS

To summarize, the data discussed in this article show that there is similarity between the distribution of structures containing different spell out possibilities for interpretable features under AgrO and D0 in an L1 and an L2/Bilingual variety in a contact situation. Despite the presence of Lamista Quechua input among the L2/Bilingual children, not all the structures from the Quechua grammar were favored or present in the L2/Bilingual data from the story-telling task. Strong pronouns were not more frequent in the L2/Bilingual children's data. They were not favored over other structures in the picture-sentence matching task by the L2/Bilingual group either. However, some differences were noted with respect to null objects, topicalizations and CP complements. Pronominal null objects and topicalizations are slightly more frequent in the L2/Bilingual stories whereas CP complements are less frequent. On the other hand, Spanish structures not common to Quechua such as clitic, clitic doubling and clitic left dislocation were found with similar frequency both in the L1 and the L2/bilingual stories data.

In spite of the similarities in distribution of structures, the interpretation of null objects and clitic doubling in both varieties showed differences. In the L2/Bilingual Spanish stories, null objects exhibit anaphoric and deictic
properties whereas in the L1 Spanish stories these properties do not appear to be clearly distinct. Clitic doubling is used in L2/Bilingual Spanish to maintain the same topic in the discourse whereas in L1 Spanish this is not the case. These differences have been related in this paper to discourse conditions on the topic structure of the sentence. Finally, on a more speculative level, I would like to suggest that differences in input may yield differences in the conditions on the spell out of features but not necessarily in the presence or absence of spell out possibilities.

7. APPENDIX

Picture-sentence matching task
1. Figure 1 [A boy is looking at a label from a box surrounded by a turtle, a frog and a dog]
   ¿El niño vio al perro?
   Did the boy see the dog?
   a) El niño no lo vio.
      The boy did not see him
   b) El niño no vio al perro.
      The boy did not see the dog
2. Figure 2 [The boy is opening a box, a little frog comes out of it, the dog is licking the little frog, a bigger frog looks from aside]
   ¿Abrió el niño una caja?
   Did the boy open a box?
   a) Sí, el niño abrió.
      Yes, the boy opened.
   b) Sí, el niño abrió la caja
      Yes, the boy opened the box.
3. Figure 3 [The big frog is biting the little frog’s leg. The boy, the turtle and the dog are standing looking at the biting]
   ¿El sapo mordió a la tortuga?
   Did the frog bite the turtle?
   a) El sapo no la mordió.
      The frog did not bite her
   b) El sapo no mordió a ella.
      The frog did not bite her
4. Figure 4 [The boy walks grabbing a stick and is followed by the dog, the turtle and the big and the little frog sitting on top of the turtle]
   ¿Miró el sapito al sapo?
   Did the little frog see the frog?
   a) Sí, el sapito lo miró.
Yes, the little frog saw him
b) Sí, el sapito lo miró a él.
Yes, the little frog saw him

5. Figure 5 [The boy, the big frog and the turtle are looking for the little frog in a river. The boy is grabbing a plant]
¿El niño cogió una planta?
Did the boy grab the plant?

a) El niño la cogió.
The boy grabbed it
b) El niño cogió.
The boy grabbed it

6. Figure 6 [The big frog kicks the little frog while sitting on top of the turtle]
¿El sapo pateó al sapito?
Did the frog kick the little frog?

a) Sí, el sapo lo pateó a él.
Yes, the frog kicked him
b) Sí, el sapo pateó a él.
Yes, the frog kicked him.

7. Figure 7 [The boy is crying and hugging the dog, the turtle and the frog are standing close to the boy and crying]
¿El niño abrazó al perro?
Did the boy hug the dog?

a) Sí, el niño abrazó al perro.
Yes, the boy hugged the dog
b) Sí, el niño lo abrazó al perro.
Yes, the boy hugged the dog

8. Figure 8. [The boy, the dog, the turtle and the big frog are standing on a boat. The turtle is looking at the big frog]
¿La tortuga miró al sapo?
Did the turtle look at the frog?

a) Sí, la tortuga miró a él.
Yes, the turtle saw him
b) Sí, la tortuga miró al sapo.
Yes, the turtle saw him

9. Figure 9. [The big frog kicks the little frog while sitting on top of the turtle]
¿El sapo pateó a la tortuga?
Did the frog kick the turtle?

a) No, el sapo no la pateó a ella.
No, the frog did not kick her
b) No, el sapo no pateó.
No, the frog did not kick
10. Figure 10 [The boy is opening a box, a little frog comes out of it, the dog is licking the little frog, a bigger frog looks from aside]

¿Lamió el perrito a la tortuga?
Did the little dog lick the turtle?

a) No, el perrito no la lamió a ella.
No the little dog did not lick her

b) No, el perrito no lamió a la tortuga.
No the little dog did not lick the turtle

11. Figure 11 [The boy walks grabbing a stick and is followed by the dog, the turtle and the big and the little frog sitting on top of the turtle]

¿Agarró la tortuga un palo?
Did the turtle grab a stick?

a) No, la tortuga no agarró.
No the turtle did not grab

b) No, la tortuga no agarró eso.
No the turtle did not grab that

12.

a) El niño buscaba un sapo que no pateara.
The boy looked for a frog that would not kick

b) El niño lo buscaba a un sapo que no pateara.
The boy looked for a frog that would not kick

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8. NOTES

1 Thanks to Carnegie Mellon University for financing this study as part of a larger project on L2/Bilingual acquisition. Many thanks to the research assistants that participated in this project: Omar Beas, Milagros Lucero, Jaime Navarrete, José Riqueros and Irma Sánchez. Thanks also to the Director, teachers and children at the Colegio 6037 in San Juan de Miraflores and at the Escuela Luis Bruzzone in Wayku, Peru. Special thanks to Jaime Doherty. Thanks also to an anonymous reviewer for her comments. All errors are mine. This study was conducted under affiliation to the Pontificia Universidad Católica del Perú.

2 There is variation in the clitic forms used. For masculine singular the forms "lo" or "le" are subject to dialectal variation.

3 Liceras, J. B. Soloaga and A. Carballo (1992) conducted a study on the L2 acquisition of topicalization and clitic left dislocation among French and English speakers. They found a strong preference among their comparison group of Spanish native speakers for clitic left dislocation structures and a similar acceptance rate among non-natives.

4 Rivero (1980) and Cinque (1990) propose that in clitic left dislocation structures, the doubled DP is generated to the left of the sentence.

5 The availability of clitic doubling for indefinites in Andean Spanish suggests that in this language, clitics are not as scope markers for VP-external definite NPs as proposed recently by Franco and Mejías-Bikandi (1998).

6 For Spanish the relevant interpretable phi-features are: number, gender, person, definite and specific.

7 With the exception of demonstratives, the latter possibility is not found in most native and even in non-varieties of Spanish. In previous work on the L2 acquisition of Spanish clitics by native speakers of English (Sanchez and Al-Kasey 1998), following Everett's proposal, we proposed that L2 acquisition of clitics depends crucially on the acquisition of the functional features associated to AgrO0 and D0. We did not find substantial evidence for transferring of strong pronouns from English into Spanish. In the case of formal instruction, we also found avoidance as a strategy employed by L2 acquirers of Spanish when producing constructions involving clitics.

8 In the case of clitic doubling, there would be spell out under D0 but the maximal projection DP would also contain an NP. This would also be the case of a regular DP in object position.

9 Although it lacks overt third person object agreement morphemes, Lamista Quechua has 1st and 2nd person object agreement morphemes. 2nd person object morphemes are fused with 1st and 3rd person subject morphemes. The following examples show their distribution:

(i) Kawa-wa-n
See-1p obj-3p subj
'S/he sees me'

(ii) Kawa-wa-nki
See-1p obj-2p subj
'You see me'

(iii) Kawa-wa-nchi
See-1p obj-1ppl/2ppl subj
'S/he sees us'

(iv) Kawa-yaki
See-2p obj 1p subj
'I see you'

(v) Kawa-shunki
See-2p obj 3p subj
SPELL OUT CONDITIONS IN L1 AND L2 CONTACT SITUATIONS

'S/he sees you'

10 Due to the language shift situation, it is possible that these children have been exposed to the two languages since birth but at different periods of their lives they might have had increased exposure to Spanish. We will refer to them as Bilinguals.

11 Scanned versions of the pictures used in the test are available from the author. For space limitations, they are not included in this article.

12 The transcriptions of the stories are available from the author upon request.

13 There was a 12th question for which no picture was included due to the CP nature of the direct object.

14 Children who perceive themselves as bilinguals with an early exposure to Spanish show higher percentages of incomplete or not identified direct objects and null pronouns than L2 speakers. This is a characteristic found in L2 Andean Spanish (Camacho, Paredes and Sanchez 1996). Children who perceive themselves as L2 Spanish acquirers show a higher percentage of clitic, clitic doubling with a DP and CLLD structures, which are structures found in native varieties of Spanish. Given that the differences in distribution are not clearly focalized and cannot be coherently correlated to the children's perceptions of their exposure to both languages we decided to collapse their results in the L2/Bilingual Spanish column.

15 For examples, see section 4.2.

16 In Andean Spanish feminine features may be expressed by the masculine pronoun 'lo'.

17 This condition does not seem to apply to the discourse situation involved in the picture-sentence matching task as in that task L1 and L2/bilingual children showed a preference for clitic doubling over other structures.

9. REFERENCES


