Crosslinguistic Influence in Andean Spanish: 
Word Order and Focus

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1. Introduction

Research on bilingual L1 and L2 acquisition and language contact has shown that structures that involve the syntax-pragmatics interface (the C-domain) are permeable to crosslinguistic influence. Hulk & Müller (2000), for example, argue that the syntax-pragmatics interface needs to be involved in order for crosslinguistic influence to occur in bilingual acquisition. Other studies in bilingual L1 and L2 acquisition in children (Müller & Hulk 2001, Serratrice et al. 2004, Argyri & Sorace 2007) have confirmed that interfaces, and in particular the syntax-pragmatics interface, are sensitive to crosslinguistic influence. This finding is compatible with studies in language contact which have shown a transfer of pragmatic uses in bilingual adults (Prince 1988, Silva-Corvalán 1993, 1994). Both studies in SLA and language contact thus show that the C-domain is sensitive to crosslinguistic influence. We expect this correlation between SLA and language contact studies, because contact varieties are often the result of a massive second language acquisition by adult speakers.

The present study is concerned with crosslinguistic influence at the syntax-pragmatics interface in Andean Spanish, which is a contact variety spoken (primarily) in the Andes of Bolivia, Ecuador and Peru. Historically Andean Spanish is the result of second language acquisition of Spanish by adult Quechua speakers. In both Quechua and Andean Spanish we commonly find OV word order, whereas in other varieties of Spanish the most common order is VO. It has been argued that there is a transfer from Quechua into Andean Spanish word order (Muysken 1984, Ocampo & Klee 1995, Camacho 1999, Escobar 2000, i.a.). At first sight, it seems that there is a syntactic transfer. However, the fact that Quechua and Andean Spanish have the same surface OV word order does not necessarily mean that this word order has the same syntactic structure in both languages. I did several syntactic tests to determine the structure of OV word order in both languages. The results show that Andean Spanish behaves more like Standard Spanish than like Quechua. In this paper, I argue that there is no syntactic transfer from Quechua into Andean Spanish, i.e. the Spanish structure has not changed. The hypothesis for further research, which I am not going to address directly in this paper, is that there might have been a transfer of pragmatic uses from Quechua into Andean Spanish, which would explain the relatively frequent use of OV word order in Andean Spanish. The study lends support to the idea that syntax is relatively impermeable to foreign influence (cf. Silva-Corvalán 1993, 1994).

The structure of the paper is as follows. In section 2, I present the objectives of the study. In section 3, I discuss the methodology I used for my data collection. In section 4, the results of a preliminary analysis of the naturalistic data are presented. Section 5 is concerned with focus fronting in Standard Spanish. In section 6, I discuss the results of the two experiments I designed to study the syntactic structure of OV word order in Andean Spanish and Quechua. Section 7 contains a summary of the main findings and some conclusions.

I would like to thank Karlos Arregi and three anonymous reviewers for their valuable comments. All remaining errors are my responsibility.
2. Objectives

One of the characteristics of Andean Spanish is the use of non-canonical word orders. The basic word order of (Standard) Spanish is *subject-verb-object* (SVO). In Andean Spanish the object frequently appears in preverbal position, resulting in alternative orders, such as OSV and OVS ((1)):

(1) ‘Al gallo come el zorro.’
    To the rooster eats the fox
    ‘The fox eats the rooster.’

Previous studies have attributed this phenomenon to an (indirect) influence of Quechua, where the object typically precedes the verb (Muysken 1984, Ocampo & Klee 1995, Camacho 1999, Escobar 2000, i.a.). However, they do not spell out precisely what has been transferred. To tease out the precise nature of the transfer, we must separate syntactic issues from pragmatic issues. The syntactic issues concern the structure of different word orders. The same surface word order does not necessarily have the same (syntactic) structure in different languages. Therefore, we need to determine what structure OV word order has in Andean Spanish, Standard Spanish and Quechua. The pragmatic issues refer to the use of different word orders. In Standard Spanish objects can be fronted for emphasis. We need to determine what pragmatic function preverbal objects have in Andean Spanish, Standard Spanish and Quechua. The alternative orders are also possible in Standard Spanish, but in Standard Spanish fronted elements encode topic or focus. The discussion here will be limited to focus fronting. Since focus fronting could explain the high frequency of preverbal objects in Andean Spanish, we must determine whether focus fronting in Andean Spanish has the same properties as in Standard Spanish.

The present study is part of a larger study on word order and focus in Andean Spanish. The research questions of the study are: (a) is there a transfer from Quechua into Andean Spanish word order, and (b) if so, what is the precise nature of the transfer? There are essentially two different hypotheses regarding the nature of the transfer from Quechua into Andean Spanish. The first hypothesis is that there has been a transfer of both pragmatic uses and syntactic properties from Quechua into Andean Spanish. This hypothesis implies that syntax can change. The second hypothesis states that there has been a transfer of pragmatic uses, but not of syntactic properties. The fact that there have been changes in word order does not necessarily mean that there has been a change in syntax. A preliminary analysis of my data confirms the second hypothesis. The overall objective of the study is to show that the transfer from Quechua into Andean Spanish is restricted to pragmatics, i.e. the syntactic structure is identical to that of focus fronting in Standard Spanish, but there might have been a transfer of pragmatic uses from Quechua into Andean Spanish.

In this paper I report the preliminary results of two experiments I designed to show that syntactically focus fronting in Andean Spanish is identical to focus fronting in Standard Spanish. In Standard Spanish focus fronting is subject to weak crossover effects and can be long distance. I designed experiments on weak crossover and long distance movement to test for these properties in Andean Spanish and Quechua. The results so far reveal that the syntactic structure of Quechua has not been transferred. Preverbal objects in Andean Spanish are syntactically identical to fronted focalized elements in Standard Spanish, but they seem to have a more general use. We need to explain why preverbal objects are more frequent than in Andean Spanish than in Standard Spanish. The hypothesis for further research is that the pragmatic uses of preverbal objects in Quechua might have been transferred to Andean Spanish. The study confirms previous research in language contact (Prince 1988, Silva-Corvalán 1993, 1994) and findings in SLA regarding the vulnerability of the C-domain (Serratrice et al 2004, Argyri & Sorace 2007, i.a.).

3. Methodology

For the larger study, I collected naturalistic data in Spanish in Tarata (Bolivia) in 2001, and in Juncal/Cañar (Ecuador) and the department of Cuzco (Peru) in 2004. In order to complement the naturalistic data, I conducted a research consisting of picture-story tasks and sentence judgment tasks
in Spanish and the local varieties of Quechua in the same areas in Bolivia and Ecuador in 2006 and 2007. The selected regions are similar in that they are semi-urban and characterized by a high degree of bilingualism in Spanish and Quechua.

The naturalistic data from Bolivia, Ecuador and Peru consist of 69 tape recordings of informal conversations in Spanish with adult simultaneous and early sequential bilingual speakers of Quechua and Spanish, and monolingual Spanish speakers. To determine whether a subject was a simultaneous or sequential bilingual, I asked him/her about the age and context of acquisition of Quechua/Spanish, the languages spoken by his/her parents and siblings, the home language, and the domains of use of Quechua/Spanish. The simultaneous bilinguals in this study acquired Quechua and Spanish at the same time at home, i.e. both Quechua and Spanish were used at home by both parents. Most of my Bolivian subjects were simultaneous bilinguals. The sequential bilinguals in this study acquired Quechua prior to Spanish; the age of acquisition of Spanish was around 4 or 5 years. For these sequential bilinguals, the home language was Quechua, whereas education was in Spanish. All of the Ecuadorian bilinguals were sequential bilinguals. Among the Peruvian subjects were simultaneous and sequential bilinguals. Table (1) shows the number of tape recordings per region and type of speaker for the naturalistic data.

Table 1: Naturalistic data (Spanish)

<table>
<thead>
<tr>
<th>Region</th>
<th>Simultaneous bilinguals</th>
<th>Sequential bilinguals</th>
<th>Spanish monolinguals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>16</td>
<td>17</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Ecuador</td>
<td>19</td>
<td>8</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Peru</td>
<td>19</td>
<td>8</td>
<td>1</td>
<td>28</td>
</tr>
</tbody>
</table>

The experimental data consist of picture-story tasks and sentence-judgment tasks in Spanish and Quechua. Tables (2) and (3) show the number of tape recordings per region and type of speaker for the experimental data in Spanish, and in Quechua, respectively.

Table 2: Experimental data (Spanish)

<table>
<thead>
<tr>
<th>Region</th>
<th>Simultaneous bilinguals</th>
<th>Sequential bilinguals</th>
<th>Spanish monolinguals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Ecuador</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 3: Experimental data (Quechua)

<table>
<thead>
<tr>
<th>Region</th>
<th>Simultaneous bilinguals</th>
<th>Sequential bilinguals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Ecuador</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

For the purpose of this paper, I did a preliminary analysis of the Spanish naturalistic data from Bolivia (see section 4), and of part of the Spanish and Quechua experimental data from Bolivia and Ecuador (see section 6). The naturalistic data are important because they show us the actual use of the 2 The Quechua variety spoken in Cañar belongs to the QIIB dialects. The Quechua variety spoken in the department of Cochabamba in Bolivia belongs to the QIIC dialects (Cerrón-Palomino 1987).
3 The reason for expanding my research to include sequential bilinguals was that there are few simultaneous bilingual speakers in Ecuador. Only 3% of the sample of Büttner & Haboud’s (1993) and Haboud’s (1998) survey, which involved 2,841 people throughout nine highland provinces of Ecuador, were simultaneous bilingual speakers (cited in Haboud 2004).
4 My subjects did not receive bilingual education.
different word orders (see section 4) and provide us with a context for the different word orders. Based on the naturalistic data alone, however, we cannot answer the research questions. To get a better understanding of the motivations for and constraints on word order variation, I created picture-story tasks and sentence-judgment tasks. Sentence-judgment tasks provide us with negative evidence, i.e. information about structures that cannot occur (Schütze 1996), and help us to construct a theory (see section 6).

4. Naturalistic data

The discussion here is based on an analysis of the data from 16 simultaneous bilingual speakers of Quechua and Spanish from Tarata, which is located approximately 18 miles from Cochabamba (Bolivia). The subjects’ ages ranged from 29 to 50 years, with a mean age of 41 years. Eight of the subjects were male and eight were female. In informal conversations I asked for specific information concerning the subject’s educational level. Eight of the subjects were professionals, i.e. they received some form of higher education after secondary school. The other eight subjects were non-professionals, i.e. they received no more than secondary education.

The data consist of 16 recordings of informal conversations in Spanish between the researcher and the subject. The subjects were asked about their occupation, place of birth, L1, L2, the age of acquisition of Quechua/Spanish, the frequency and domains of use of Quechua/Spanish, and their family. These factors determine in part the type of Spanish/Quechua people speak and show their degree of bilingualism. The conversations lasted 40-60 minutes each, and took place in public places or at the subject’s home. Among the topics included were local traditions, family, daily life, the political and economic situation, bilingual education, language attitudes, dreams, beliefs, the subject’s childhood, and important events in the subject’s life.

An analysis of the naturalistic data reveals that preverbal objects are relatively frequent in Andean Spanish. Table (4) shows the frequency of the orders SOV, OVS, and OSV (relative to the total number of sentences with a subject, an object and a verb), and the frequency of the order OV (relative to the total number of sentences with an object and a verb, but no subject), in the naturalistic data from Bolivia.

<table>
<thead>
<tr>
<th>Order</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>10/611</td>
<td>1.6</td>
</tr>
<tr>
<td>OVS</td>
<td>36/611</td>
<td>5.9</td>
</tr>
<tr>
<td>OSV</td>
<td>6/611</td>
<td>1.0</td>
</tr>
<tr>
<td>OV</td>
<td>263/1357</td>
<td>19.4</td>
</tr>
</tbody>
</table>

To compare, Ocampo (1989) found the order OV only 6% of the time in the speech of 19 middle-class speakers from Buenos Aires (as cited in Ocampo & Klee 1995). We can thus conclude that preverbal objects in Andean Spanish are relatively frequent. These results confirm those of previous studies on word order variation in Andean Spanish (Muysken 1984, Ocampo & Klee 1995, i.a.). The relatively high frequency of preverbal objects could be explained by focus fronting. Therefore, we need to look at focus in Standard Spanish, Andean Spanish and Quechua.

5. Focus

In Standard Spanish there are essentially three strategies to encode focus: the focus can appear at the end of the sentence (where it receives nuclear stress), the intonation and the place of the stress can be changed (i.e. stress strengthening), or the focus can appear at the beginning (via focus fronting). Of these three strategies, focus fronting is particularly relevant to my research, since focus fronting could explain the high frequency of preverbal objects shown by the naturalistic data.
Example (2), in which an element is preposed to the left-periphery of the sentence and assigned (contrastive) stress, is an example of focus fronting in Standard Spanish:

(2) \[F\text{Manzanas}] compró Pedro (Zubizarreta 1999: 4239).
\[F\text{Apples} \quad \text{bought} \quad \text{Pedro} \quad \text{Pedro bought apples.}’

The main syntactic properties of focus fronting in Standard Spanish are its sensitivity to weak crossover effects and long distance movement. In order to determine whether focus fronting in Andean Spanish has the same syntactic properties as focus fronting in Standard Spanish, I designed experiments to test for weak crossover effects and long distance movement. I conducted the same experiments in Quechua to determine whether there is a transfer from Quechua into Andean Spanish.

6. Experimental data
6.1. Subjects

The subjects for this part of the study were selected according to the criteria that I already used in my 2001/2004 fieldwork. In this paper, I discuss the results of a preliminary analysis of the Spanish data from 10 subjects (5 from Bolivia, and 5 from Ecuador), and of the Quechua data from 8 subjects (4 from Bolivia, and 4 from Ecuador). Table (5) indicates the characteristics of the subjects for the different parts of the experimental data.

Table 5: Characteristics of the subjects for the experimental data

<table>
<thead>
<tr>
<th>Data</th>
<th>Place</th>
<th>Number</th>
<th>Speaker</th>
<th>Sex</th>
<th>Age</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish wco &amp; LD mvt</td>
<td>Bolivia 2006</td>
<td>5</td>
<td>simultaneous bilingual</td>
<td>3 F, 2 M</td>
<td>40-63 mean: 48</td>
<td>3 prof, 2 non prof</td>
</tr>
<tr>
<td>Quechua wco</td>
<td>Bolivia 2006</td>
<td>4</td>
<td>simultaneous bilingual</td>
<td>2 F, 2 M</td>
<td>40-63 mean: 53</td>
<td>3 prof, 1 non prof</td>
</tr>
<tr>
<td>Quechua LD mvt</td>
<td>Bolivia 2007</td>
<td>4</td>
<td>simultaneous bilingual</td>
<td>1 F, 3 M</td>
<td>40-63 mean: 52</td>
<td>4 prof</td>
</tr>
<tr>
<td>Spanish wco &amp; LD mvt</td>
<td>Ecuador 2006</td>
<td>5</td>
<td>sequential bilingual</td>
<td>2 F, 3 M</td>
<td>21-52 mean: 36</td>
<td>4 prof, 1 non prof</td>
</tr>
<tr>
<td>Quechua wco</td>
<td>Ecuador 2006</td>
<td>4</td>
<td>sequential bilingual</td>
<td>3 F, 1 M</td>
<td>21-51 mean: 32</td>
<td>2 prof, 2 non prof</td>
</tr>
</tbody>
</table>

Since most of my subjects were illiterate in Quechua and/or Spanish, I created picture-story tasks and oral sentence-judgment tasks for my experimental data collection. I used three traditional Andean stories (La zorra y el gallo, ‘The fox and the rooster’, La lora y la zorra, ‘The parrot and the fox’, and La zarigüeya y el utuskuru, ‘The opossum and the worm’ (Martínez Parra 1999)), and six invented short stories, which provided a clear context for the sentences under study. The subjects narrated the

5 The following abbreviations are used: F= female; LD mvt= long distance movement; M= male; prof= professional; wco= weak crossover.
6 The subjects were divided in two different groups along the dimension of educational level: professionals and non-professionals. Professionals received some form of higher education after secondary school. Non-professionals received no more than secondary education. In informal conversations I asked for specific information concerning the subject’s educational level.
stories, in Spanish and/or Quechua, based on the pictures, which enabled me to check for understanding. The oral sentence-judgment tasks consisted of: (a) question-answer congruences, (b) questions and answers to check for weak crossover in questions and focus fronting, and (c) questions and answers to check for long distance movement with focus fronting. For each question, I first elicited a spontaneous answer and then presented the subject with several answers to the question. I asked the subjects if the sentences could be used in the context I had provided. If subjects rejected a sentence, I asked them to explain why the sentence was bad, and/or to locate the ungrammaticality of the sentence. These additional tasks helped me to ensure that the reasons why the subjects rejected sentences were relevant to the issue under study. In addition, the subjects were asked to compare sentences and indicate their preferences. The sessions generally lasted an hour or an hour and a half, and were tape-recorded. Below, I discuss the experiment design and the results of the experiments on weak crossover (section 6.2) and long distance movement (section 6.3).

6.2. Experiment 1: Weak crossover

6.2.1. Weak crossover in Standard Spanish

In Standard Spanish focus fronting leads to weak crossover effects (Rizzi 1997). The sentence in (3) with focus fronting and weak crossover is odd:

(3) ?? [F a cada niño, su madre aprecia t.]

To every child, his mother appreciates.

‘His mother appreciates every child.’

In (3) cada niño, ‘every child’, crosses a pronoun (su, ‘his’) with which it is co-indexed, but the pronoun does not c-command the trace, giving rise to weak crossover effects.

6.2.2. Weak crossover in Andean Spanish and Quechua

6.2.2.1. Experiment design

To find out if focus fronting in Andean Spanish and Quechua is sensitive to weak crossover effects, I created three different picture-story and sentence-judgment tasks. The sentences in (5a)-(6a), which are answers to the question in (4a), illustrate the type of sentences I constructed to test for weak crossover with focus fronting in Andean Spanish: in these sentences the object (a cada niño, ‘every child’, in (5a) and a ningún niño, ‘no child’, in (6a)) is preposed to the left-periphery of the sentence and assigned stress. In both sentences, the object crosses the pronoun su, ‘his’. Weak crossover effects are generally not stable, i.e. judgments on weak crossover vary within the same language. Therefore, two types of control sentences were used in the experiment: questions and passive sentences. I included questions (e.g. (4)) to see if there is a correlation between the judgments for weak crossover in questions and the judgments for weak crossover with focus fronting. I also included passive sentences as control sentences (see (4b), (5b) and (6b)); in passive sentences we do not expect weak crossover effects because the preposed element does not cross a pronoun.

(4) a. ¿A qué niño, trajo su madre a la escuela?
   To which child, brought his mother to the school
   ‘Which child did his mother bring to school?’

   b. ¿Qué niño fue traído a la escuela por su madre?
   Which child was brought to the school by his mother
   ‘Which child was brought to school by his mother?’

(5) a. [F a cada niño, trajo su madre a la escuela.]
   To every child, brought his mother to the school.
   ‘His mother brought every child to school.’
b. Cada niño fue traído a la escuela por su madre.

Every child was brought to the school by his mother.

(6) a. [A ningún niño] trajo su madre a la escuela.

[To no child] brought his mother to school.

His mother brought no child to school.

b. Ningún niño fue traído a la escuela por su madre.

No child was brought to school by his mother.

In order to determine whether the subjects had weak crossover, I looked at the control sentences. First I looked whether subjects had weak crossover in questions. I elicited judgments for the question with weak crossover ((4a)) and the one with a passive construction ((4b)). If subjects rejected the question in (4a), or showed a clear preference for the question in (4b) over the one in (4a), then that was taken as evidence for weak crossover effects in questions. I elicited a spontaneous answer to the questions, based on pictures that were shown to the subjects. The picture corresponding to the sentences in (5) shows four children who are brought to school by their mothers. The picture corresponding to the sentences in (6) shows four children who go in the opposite direction (that is, not to school). The subjects were asked to give judgments for the answers consisting of sentences with weak crossover ((5a) and (6a)) and sentences with a passive construction ((5b) and (6b)). The passive sentences functioned as control sentences: the subjects who rejected the sentences in (5a) and (6a) or who indicated a clear preference for (5b) and (6b) had weak crossover with focus fronting. In all the cases, I checked that the reason for rejecting a sentence was in fact the structure of the sentence. Finally, I looked at the correlation between judgments for weak crossover in questions and those for weak crossover with focus fronting. If the subjects showed weak crossover in both the control sentences (the passive sentences and the questions) and the sentences with focus fronting, this was taken as evidence for weak crossover with focus fronting.

In order to check for weak crossover effects in Quechua, I constructed a similar set of questions (see (7)) and answers with focus fronting (see (8)-(9)) in Quechua. The context of the sentences (the question and the story depicted in the pictures) indicate that the fronted elements are focalized. The following sentences illustrate the type of sentences I used for the Bolivian variety of Quechua:

(7) ¿Mayqen wawa-ta-taj, mama-n, apa-mu-sha-n yachay wasi-man?

Which child-AC-Q mother-3POS bring-DIR-PROGR-3S school-DIR

‘Which child does his mother bring to school?’

(8) [\textit{F} Sapa wawa-ta, mama-n, apa-mu-sha-n yachay wasi-man.]

\textit{Every child-AC mother-3POS bring-DIR-PROGR-3S school-DIR}

‘His mother brings every child to school.’

(9) [\textit{F} Ni pi wawa-ta, mama-n, pu-sha-n-chu yachay wasi-man.]

\textit{No child-AC mother-3POS bring-DIR-PROGR-3SG school-DIR}

‘His mother brings no child to school.’

As in the Spanish variant of the experiment, I first elicited a spontaneous answer to the question in (7), and then asked the subjects to give acceptability judgments for different sentences.

The following glosses are used: \textit{AC}= accusative; \textit{CAUS}= causative; \textit{DIR}= directive; \textit{POS}= possessive; \textit{PL}= plural; \textit{PROGR}= progressive; \textit{Q}= question marker; \textit{S}= singular; \textit{NOM}= nominalizer.
An anonymous reviewer noted that most focused elements in Quechua are morphologically marked with –*m* or –*mi*. In the presentation of my own examples here (see (7)-(9) above) I do not use the suffix –*mi*. During the experiment I presented each sentence with and without the focus marker –*mi* on the fronted element. In Bolivia, the suffix –*mi* is practically obsolete, i.e. the subjects of this study recognized the suffix but did not use it. In Ecuador, the suffix is still in use.\(^8\) Some subjects in Ecuador indicated a preference for the sentences with –*mi*, but they also accepted the same sentences without the focus marker. What is important here is that the absence or presence of the suffix –*mi* did not have an effect on the judgment, except in the case of some Ecuadorian subjects who showed a slight preference for the sentences with –*mi*. Since the examples above are from Bolivia and my subjects did not produce the sentences with –*mi*, I present the sentences in the examples here without a morphological marker on the fronted element.

### 6.2.2.2. Results

Table (6) indicates the number and percentage of subjects who have weak crossover in questions and weak crossover in focus fronting, in Andean Spanish and in Quechua.

**Table 6: Weak crossover in Andean Spanish and Quechua**

<table>
<thead>
<tr>
<th></th>
<th>Andean Spanish</th>
<th>Quechua</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td><strong>wco in questions</strong></td>
<td>5/10</td>
<td>50</td>
</tr>
<tr>
<td><strong>wco in FF</strong></td>
<td>5/10</td>
<td>50</td>
</tr>
</tbody>
</table>

The data on Andean Spanish demonstrate that 50% of the subjects have weak crossover in questions, and 50% of the subjects have weak crossover in focus fronting. Typically we find variability within the same language or dialect with respect to weak crossover effects, which explains the relatively low percentages. What is important is the correlation between weak crossover effects in questions and focus fronting. The results reveal that 80% (4 out of 5) of the subjects who have weak crossover in questions also have weak crossover in focus fronting. We can thus conclude that focus fronting in Andean Spanish, just as focus fronting in Standard Spanish, is sensitive to weak crossover effects.

The data clearly show that in Quechua focus fronting is not sensitive to weak crossover effects, since none of the 8 subjects show weak crossover in questions or focus fronting (see table (6)). This means that the sentences of the types in examples (7)-(9) were accepted by all subjects.

The data for this experiment come from two different types of bilingual speakers: simultaneous bilingual speakers (from Bolivia) and sequential bilingual speakers (from Ecuador). To check whether the type of bilingual speaker had an effect on the results for Andean Spanish, I did a subject-by-subject analysis. The results (shown in table (7)) indicate that there is no correlation between weak crossover effects and type of bilingual speaker.

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\(^8\) My data confirm Albó’s (1960) claim that –*mi* is not frequently used in the Bolivian dialects of Quechua, and that it is more frequent in (Peruvian and) Ecuadorian dialects (351).
Table 7: Weak crossover in Andean Spanish- subject by subject results

<table>
<thead>
<tr>
<th>Subjects</th>
<th>wco in questions</th>
<th>wco in FF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia- 1</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Bolivia- 2</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Bolivia- 3</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Bolivia- 4</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Bolivia- 5</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Ecuador- 1</td>
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<td>no</td>
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<td>yes</td>
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<td>Ecuador- 3</td>
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<td>no</td>
</tr>
<tr>
<td>Ecuador- 5</td>
<td>yes</td>
<td>some</td>
</tr>
</tbody>
</table>

6.3. Experiment 2: Long distance movement

6.3.1. Long distance movement in Standard Spanish

A second characteristic of focus fronting in Standard Spanish is long distance movement of the object or the subject. Example (10) shows that in Standard Spanish, long distance movement of the object is possible with focus fronting:

(10) [F Este libro] [CP creo que leyó Juan ti].
  [F This book] [CP I think that read Juan ti].
  ‘I think Juan read this book.’

In Standard Spanish we cannot use focus fronting to focalize a VP (see (11a)); focus projection is used instead (see (11b)):

    [F Ate a mouse] the cat
    ‘The cat ate a mouse.’

    The cat ate a mouse
    ‘The cat ate a mouse.’

We need to determine whether these facts for long distance movement of the subject, the object and the VP are the same in Andean Spanish and Quechua.

6.3.2. Long distance movement in Andean Spanish and Quechua

6.3.2.1. Experiment design

In order to check for long distance movement in Andean Spanish, I constructed questions with corresponding answers with long distance movement of the object (see (12)), of the subject (see (13)), and of the VP (see (14)):

(12) a. ¿Qué cree la mujer que lleva el hombre?
    What thinks the woman that takes the man
    ‘What does the woman think that the man takes?’

⁹ A number of subjects showed weak crossover effects in some sentences, but not in others.
b. [Las llamas] cree la mujer [que lleva el hombre t].
‘The llamas think the woman that takes the man.
‘The woman thinks the man takes the llamas.’

(13) a. ¿Quién cree el maestro que lee el libro?
Who thinks the teacher that reads the book
‘Who does the teacher think that reads the book?’

b. [El niño] cree el maestro [que lee el libro t].
‘The boy thinks the teacher that reads the book.
‘The teacher thinks the boy reads the book.’

(14) a. ¿Qué cree la madre que hace el niño?
‘What does the mother think the child does?’

b. [Estudia] cree la madre [que el niño t].
‘The mother thinks the child studies.’

For this experiment, three different stories and sets of questions and answers were used. The stories all involved a contrast; for example, the pictures corresponding to (12) show a man taking bulls, and a woman thinking the man is taking llamas. As in the first experiment, the subjects first gave a spontaneous answer to the question (e.g. (12a)), and then judged the sentence with long distance movement (e.g. (12b)).

I designed a similar set of questions and answers to check for long distance movement of the object ((15)), the subject ((16)), and the VP ((17)) in Quechua:

(15) [Llama-s-ta] warmi yuya-n [runa q’ati-sqa-n-ta t].
‘The woman thinks the man takes the llamas.’

(16) [Q’ari wawa] yacha-chi-q yuya-n [liwruñawi-sqa-n-ta t].
‘The teacher thinks the boy reads the book.’

(17) [Istudya-sqa-n-ta] mama yuya-n [wawa t].
‘The mother thinks the child studies.’

The Quechua sentences are different from the ones in Spanish in the sense that the Quechua sentences involve extraction from a nominalized subordinate clause. An anonymous reviewer argued that the structures in (16) and (13b) are not compatible because the Quechua case of long distance movement in (16) involves extraction from a nominalized element, whereas the Spanish one in (13b) involves extraction from a tensed clause. However, the fact that the subordinate clause in Quechua is nominalized does not explain why extraction is not possible. In fact, there are Quechua varieties in which extraction from a nominalized clause is possible (Lefebvre & Muysken 1988). It is not immediately clear why extraction is not accepted here, but what is important is that long distance movement with focus fronting is not possible in these varieties of Quechua and that this property has not been transferred to Andean Spanish.
6.3.2.2. Results

Table (8) shows the number and percentage of subjects who accepted long distance movement of the object, of the subject, and of the VP, in Andean Spanish and Quechua.

<table>
<thead>
<tr>
<th></th>
<th>Andean Spanish</th>
<th>Quechua</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>LD mvt object</td>
<td>6/10</td>
<td>60</td>
</tr>
<tr>
<td>LD mvt subject</td>
<td>5/10</td>
<td>50</td>
</tr>
<tr>
<td>LD mvt VP</td>
<td>1/10</td>
<td>10</td>
</tr>
</tbody>
</table>

The data reveal that long distance movement in Andean Spanish is possible for objects (for 60% of the subjects) and for subjects (for 50% of the subjects). VP fronting is not possible in Andean Spanish; only 10% of the subjects (1 out of 10) accepted long distance movement of the VP. For the other subjects, sentences like the one in (14b) above are unacceptable. A subject-by-subject analysis further shows that the type of bilingual speaker does not affect the results. The facts for Andean Spanish correspond to those of Standard Spanish, i.e. the syntactic properties of focus fronting in Andean Spanish are identical to those of focus fronting in Standard Spanish. In Quechua, long distance movement is not possible; none of the subjects accepted long distance movement of the object, the subject, or the VP in Quechua (see table (8)).

As an anonymous reviewer observed, the fronted elements in (15) and (16) above (section 6.3.2.1) are not case marked or marked with 

\[-mi\text{ or } -qa^{10}\]. The reviewer points out that Lefebvre & Muysken (1988) show that case marking is strongly preferred in the case of extractions out of embedded contexts. However, although Lefebvre & Muysken (1988) included data from Ecuadorian Quechua and consulted published materials on other dialects, the focus of their work is on Cuzco Quechua. Judgments for the above sentences were collected in Tarata, Bolivia (see table 5, section 6.1). I presented the sentences without morphological markers, with 

\[-mi\] on the fronted element, and with 

\[-qa\] on the fronted element. The sentences were discussed at length with and among the subjects. The subjects were also asked to locate the ungrammaticality of the sentence and to suggest how the sentence could be made acceptable. The use of morphological markers had no effect on the judgments for the sentences.

7. Conclusions

Table (9) below contains a summary of the results of the experiments on weak crossover and long distance movement in Andean Spanish and Quechua.

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10 In Quechua, topic and focus can be morphologically marked. The suffix 

\[-qa\] is used to mark the topic of the sentence or of the discourse, whereas focused elements are marked by the suffix 

\[-mi\], which also has an evidential use (Muysken 1995).
The experimental data show conclusively that syntactically focus fronting in Andean Spanish is identical to focus fronting in Standard Spanish. The data furthermore reveal that in Quechua focus fronting is not sensitive to weak crossover effects, and that long distance movement is not possible. We can therefore conclude that there is no syntactic transfer from Quechua into Andean Spanish.

As an anonymous reviewer pointed out, there is evidence of convergence towards SVO word order in some Quechua varieties among simultaneous bilinguals in Peru (Sánchez 2003). If there is a change in Quechua basic word order from SOV towards SVO, then there might be a transfer of syntactic structure. However, the simultaneous bilingual data discussed in Sánchez (2003) differ in significant ways from the simultaneous and sequential bilingual data studied here. First, the subjects for Sánchez’s (2003) study were simultaneous bilingual children between the ages of 8 and 13, whereas my subjects were steady state bilingual adults who acquired Quechua and Spanish at an early age. Second, Sánchez (2003) found a low percentage of SOV word order in her bilingual data (9.9% in the data from Ulcumayo (Quechua I), and 5.7% in the data from Lamas (Quechua II)) (102). Although I found some SVO word order in my data, my subjects frequently used SOV word order and always accepted this word order in another experiment consisting of question-answer congruences which I did not discuss in this paper. Third, Sánchez’s (2003) data show an absence of the accusative marker –ta, and the emergence of indefinite articles. My subjects, however, used –ta as in monolingual Quechua, and did not use indefinite articles. These facts show that there are significant differences between the Quechua variety spoken by Sánchez’s (2003) subjects and the one spoken by my subjects. The Quechua variety spoken by my subjects did not exhibit as much influence from Spanish as the Quechua spoken by Sánchez’s subjects. Importantly, I did not find evidence for a change towards SVO word order. Therefore, it is safe to conclude that my data indicate that there is no transfer of syntactic structure from Quechua into Andean Spanish.

The naturalistic data of my study (section 4) show a high frequency of preverbal objects in Andean Spanish. There are essentially two possibilities regarding the use of the preverbal object in Andean Spanish. The first is that it is not a focus strategy, i.e. the function has been lost. The second possibility is that it is a focus strategy, but that it is more generally used than in Standard Spanish, i.e. the function has been generalized. I tentatively adopt the second hypothesis, i.e. in Andean Spanish fronting of objects is not as restricted as in Standard Spanish. The hypothesis for further research is that the syntax-pragmatics interface is involved, and that there has been a change in function of the preverbal element. Overall, we can conclude that although Andean Spanish is a result of contact with Quechua, the transfer here seems to be restricted to pragmatic uses, and does not affect the syntax. This study is part of a larger study on word order and focus in Andean Spanish. In this paper, I focused on the syntactic aspects. In order to be able to argue convincingly for a crosslinguistic influence in the syntax-pragmatics interface, however, we also need to perform a pragmatic analysis.

This study is in tune with previous studies in language contact on pragmatic change, and the idea that syntax is relatively impermeable to influence from another language (cf. Prince 1988, Silva-Corvalán 1993, 1994). The theoretical contribution of this study furthermore has implications for the debate on the vulnerability of the C-domain: in SLA (Serratrice et al. 2004, Argyri & Sorace 2007), Agrammatic Aphasia (Ahlsén & Dravins 1990, Hamann, Penner & Lindner 1999, Grodzinsky 2000, Platzack 2001), and Specific Language Impairment (Hakansson & Nettelbladt 1993, Hansson & Nettelbladt 1995, Bottari et al. 1998). These studies show that the C-domain causes problems in several domains of language development (cf. Platzack 2001, Tsimpili et al. 2004). Interestingly,
language contact seems to follow the same pattern with errors in the C-domain as the studies in SLA, Agrammatic Aphasia and SLI. The present study suggests not only that the C-domain is involved, but it also shows that the nature of the transfer is not syntactic. The hypothesis for future research is that there has been a transfer of pragmatic uses.

It is not clear what the implications of this study are for existing theories of transfer in L2 acquisition research, such as Schwartz & Sprouse’s Full Transfer/Full Access Hypothesis (1994, 1996). The Full Transfer/Full Access Hypothesis (Schwartz & Sprouse 1994, 1996) holds that the initial state of L2 acquisition is the L1 (i.e. L2 learners start with the parameter values from their L1), and that L2 learners have full access to Universal Grammar. The Full Transfer/Full Access Hypothesis allows us to make clear predictions regarding transfer in the case of adult L2 acquisition. The subjects for the present study, however, are steady state adult bilinguals who acquired both languages in their early childhood. Although there are similarities between language contact situations and L2 acquisition situations, it is not clear what the initial state of my subjects’ grammar was at the onset of L2 acquisition, i.e. we do not know what was available for transfer.

References


