

# **Duplication in the L2 Spanish produced by Quechua-Speaking Children: Transfer of a Pragmatic Strategy**

## **Introduction**

Quechua and Spanish, languages long in contact throughout the Andes, are particularly interesting partners in bilingual speech because the word order patterns of Quechua exactly mirror those of Spanish: while Quechua is uniformly left-branching for all maximal projections, Spanish is generally right-branching.<sup>1</sup> Hence, the canonical ordering of major constituents in Quechua is SOV, whereas, in Spanish, the basic surface order is SVO. The L2 Spanish produced by Quechua-speaking children in Peru has yielded intriguing observations of interlanguage phenomena, with corresponding speculation concerning early syntactic development in the second language. In work exploring the development of Spanish word order in young native speakers of Quechua, (Minaya and Luján 1982; Luján, Minaya, and Sankoff 1984), for example, it was reported that children frequently produced "hybrid" (S)VOV structures. To account for these odd constructions, Minaya and Luján proposed that the children had a transitional grammar with a nonadult phrase structure rule: VP --> VP V. They further maintained, in support of this proposal, that the pattern was idiosyncratic of the children's interlanguage, since it could not be derived from either of the participating languages, Quechua and Spanish.

This study presents a vigorous challenge to these claims. First, the reduplicative pattern is very much alive in the Quechua spoken by both adults and children, who duplicate, presumably for emphatic effect, not only verbs but also subjects, objects, adjunct expressions, negative forms--even entire phrases. It will thus be shown that the appearance of the VOV

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<sup>1</sup> Appreciation is extended to the Spencer Foundation and to Paul Bloom, recipient of the grant, for funding of the 1996 fieldwork undertaken for this study.

pattern in child L2 Spanish clearly represents transfer of a discourse-pragmatic strategy and not a transitional, nonadult, hybrid grammar.<sup>2</sup>

The problem with the proposed grammatical rule is that it allows two identical Verb heads: VP --> V (NP) V. Such a rule violates basic principles governing the syntax of all languages, no matter which analytic framework one might adopt. For example, the rule clashes with the Theta Criterion, a crucial principle in Government and Binding Theory (Chomsky 1981) that constrains the assignment of thematic roles by a Verb to its arguments. Accordingly, each Noun Phrase must receive one and only one thematic role from the Verb, and each thematic role must be assigned to one and only one Noun Phrase. The two-headed VP rule is at odds with this principle of one-to-one assignment of thematic roles. Which Verb assigns a thematic role to the direct object? If the first Verb theta-marks the direct object, what becomes of the thematic role the second Verb has to assign? The proposal is all the more alarming given the consensus among acquisition researchers that children do not exhibit "wild grammars"; that is, they do not violate universal constraints on the formation of sentences (Goodluck 1986). Nonetheless, Minaya and Luján attribute to the children a transitional grammatical rule which would be illicit for every language in the world. It is time to put their theory to rest.

### **The (1982) Minaya and Luján study**

In the Minaya and Luján study, the corpus of Spanish utterances produced spontaneously by the Quechua-speaking children was divided into three sub-corpora according to age (5, 7, and 9 years), with each sub-corpus consisting of over 500 sentences. The VOV pattern appeared very frequently in the utterances produced by the five-year-olds (24.7%), and it gradually declined in frequency in the sentences produced by the older children (16.2% for the

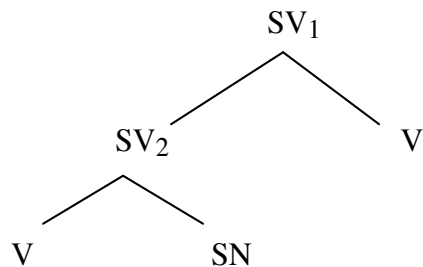
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<sup>2</sup> In fairness to Minaya and Luján, the authors mentioned in their conclusion that purely pragmatic factors might be at work in the duplication of sentence elements; nevertheless, the thrust of their analysis, which constituted the body of their paper, was the hypothesized hybrid phrase structure.

seven-year-olds; 7.5% for the nine-year-olds). In fact, on the basis of this outcome, the authors predicted that three-year-olds would produce the VOV pattern in 34% of their sentences. Among the utterances produced by the children, the following examples were reported, here renumbered as (1)-(3) for convenience.

1. De Puno traemos hartas ocas traemos. V-O-V [280: (19)]  
 From Puno we bring a lot of *ocas* we bring  
 'We bring a lot of *ocas* from Puno.'
2. Conozco los cabritos conozco. V-O-V [280: (20)]  
 I know the little goats I know  
 'I know the little goats.'
3. En acá no más es su pensión en acá. Adv-V-S-Adv [284: (33)]  
 In here no more is his *pension* in here  
 'His *pension* is right here.'

As previously mentioned, the authors accounted for sentences such as these by allowing for the following two-headed configuration for the VP in the children's transitional grammar (285: 40c).



Even if such a configuration were plausible, it could account only for the Verb Phrases in (1) and (2) above, but not for the duplicated adverbial phrase in (3), which occurs after the postverbal Subject NP *su pensión* 'his pension'. Clearly, an exclusively syntactic account of the duplication phenomenon is elusive.

Missing from the Minaya and Luján account is any reference to possible processing factors in child production of duplicated forms. For example, several analyses have pointed to nonsyntactic factors in the occasional double-AUX errors produced by English-speaking children, e.g., *\*Can he can go?* (Menyuk 1969, Prideaux 1976, Mayer, Erreich and Valian 1978, Maratsos and Kuczaj 1978, Nakayama 1987). Nearly twenty years ago, Menyuk suggested that children may duplicate elements to ensure that the structures they are producing are fully understood. In a later study, Nakayama proposed the Syntactic Blends Hypothesis (SBH) to account for duplication errors. Accordingly, very young speakers of English may forget which of two competing forms they have selected for production, e.g., *Can he go* and *He can go*, consequently blending the two in an utterance with a duplicated auxiliary. Importantly, for Nakayama the error is a processing phenomenon which occurs when the demands of sentence production exceed children's processing capacity.

The SBH proposal would work for sentences such as (1) above, provided that the following two sentences were both acceptable in Spanish: *(De Puno) traemos hartas ocas* and *(De Puno) hartas ocas traemos*. The latter variant, with OV word order, is ill-formed in standard Spanish. However, Muysken (1984) provides evidence that sentences with OV word order are quite typical of vernacular varieties of Andean Spanish; in that case, both forms might be acceptable variants for the Peruvian children in the Minaya and Luján study. Nevertheless, there are two further considerations which lead one to abandon the SBH proposal as a plausible explanation. First, the incidence of the VOV pattern is very high; that is, the percentage of such errors in the Minaya and Luján corpus is probably too great to attribute to processing pressures during production. Second, the subjects in the study are much older than the three- to five-year-olds observed in the Nakayama study. Even though the Quechua-speaking children are

producing sentences in a second language, their overall processing capacity is no doubt greater than that of younger children; moreover, the VOV pattern occurs in sentences which are not syntactically complex. Clearly, other factors must be involved: a good candidate for consideration is the pragmatic function of duplication in the first language, Quechua.

### **Reduplication phenomena in adult Quechua**

Adult speakers of Quechua duplicate diverse elements utterance-finally for emphatic effect. This is illustrated in (4)-(8) below, all showing utterances produced spontaneously by Quechua-speaking adults living in the Department of Arequipa in southern Peru. The sentences were produced by different speakers with varying levels of proficiency in Spanish. They are examples from two corpora of naturalistic speech, one recorded on the outskirts of the city of Arequipa in 1993 and the second, in the rural community of Chalhuanca (Caylloma Province) in 1996.

4. Tarpu - nku papa, cebada, hawas, q'ala - n - pacha tarpu - nku.

Grow 3 pl potatoes barley fabas everything grow 3 pl

'They grow potatoes, barley, faba beans--everything.'

V-O-V

5. Uña - ta lliq chichi - rqu - nqa uña - ta.

Lamb Acc all hail Exhort 3 fut lamb Acc

'It will hail on the lamb(s).'

O-V-O

In (4)-(5), we find that adult Quechua speakers duplicate not only the verb but also the direct object NP. Examples (6)-(7) below exhibit duplication of the quantifier *tawa* 'four' and the negative question form *manachu* 'won't?'. Each of the diverse duplicated elements in these sentences is highlighted through repetition at the very end of the utterance.

6. Tawa wawa - y tawa .  
 Four child Poss 1 sg four  
 'I have four children.'
7. Paqarin manachu waqa - chi - ra - mu - sunki manachu?  
 Tomorrow Neg cry Caus Exhort Dir 3>2 Neg  
 'Tomorrow won't they make you cry?'
8. Noqa huch'uy maq'ta - lla ka - rqa - ni huch'uy maq' t - ito.  
 I little boy Delim be Past 1 sg little boy Dim  
 'I was just a little boy.'

In (8), it is the predicate complement NP which is highlighted in this way. This utterance is particularly interesting, for it reveals that the duplicated element may differ in form from the initial expression of the element; it is not necessarily an exact replicate. The head of the initial NP, *maq'ta* 'boy', bears the Delimitative suffix *-lla* 'just', whereas the duplicated noun root exhibits the Diminutive suffix *-ito*, a suffix borrowed from Spanish. In fact, the duplicated constituent may even be a synonym, altogether different in form from the initial constituent. It is also important to note that there is sometimes a phonological break before the final constituent; at other times, no break is detected.

The corpora of adult utterances also yield instances of duplicated elements occurring in Spanish sentences as well as in utterances with intrasentential code-switching from Quechua to Spanish. Typical monolingual Spanish utterances are presented in (9)-(12).

9. Te vamos a matar-te.  
 You go-1 pl to kill you  
 'We're going to kill you.'

10. Y ya no es loco ya.  
 And now no be-3 sg crazy now  
 'And he isn't crazy any more.'
11. Mi mamá era quechua legítima era.  
 My mom be-Past-3 Quechua legitimate be-Past-3  
 'My mom was a legitimate Quechua.'
12. Más frío hace allá, más frío hace.  
 More cold make-3 there, more cold make-3 sg  
 'It's colder there.'

In these sentences, diverse elements are highlighted through repetition at the end: pronominal clitics (9), adverbs (10), verbs (11), and entire phrases (12). In (12), the repeated phrase, *más frío hace* 'it's colder', exhibits Quechua-like OV word order; the equivalent in standard Spanish would be *hace más frío*, with the Verb first. The adults who produced these utterances are bilingual speakers of long standing. In their daily routine as inhabitants of one of Peru's largest cities, they make use of Spanish constantly in different domains. Why, then, should they be producing Spanish utterances with Quechua-like patterns of word order and duplication? As Muysken has explained, it may well have to do with the variety of Spanish spoken within the bilingual speech community. The particular variety of Spanish acquired by these adults may itself have permanently acquired interlanguage features, including the transferred discourse-pragmatic strategy of highlighting elements through duplication (Muysken 1984: 102):

As time goes on, the products of intermediate and advanced interlanguage grammars are incorporated into the native speech community, but most often as vernacular, nonstandard forms. Within a synchronic perspective, then, native speakers of the target vernacular produce outputs which seem like interlanguage outputs.

In the final two examples of adult utterances, we find duplication in intrasentential code-switching. Example (13) shows equivalent forms meaning 'there are', while (14) exhibits a sentence-final Spanish version of utterance-initial *ni-* 'say'.

13. Hay bastantes fiestas ka - n.

There are many holidays there are

'There are many holidays.'

14. Ni - wa - q - ku te va a pagar plata dice.

Say 1 obj Agt 3 pl you go-3 to pay money say-3

'They'd say to me, "He's going to pay you money." '

Code-switches such as these, occurring when the language partners exhibit contrasting word order, have been described in the literature as portmanteau forms (e.g. Nishimura 1986 for Japanese-English; Park, Troike, and Park 1993 for Korean-English). It seems plausible, given the monolingual Quechua and Spanish utterances produced by these bilingual speakers, that the code-switches reveal yet another instance of final repetition for emphatic effect.

### **Reduplication in child Quechua**

Having established that adult speakers of Quechua produce utterances with highlighted elements duplicated at the very end, we now turn to the spontaneous production of very young children. If it can be shown that Quechua-speaking children also produce VOV and other duplication patterns for emphatic effect, the sentences in the Minaya and Luján corpus are readily explained: they represent transfer of a purely pragmatic strategy in the early production of L2 Spanish sentences.

In what follows, the discussion will center on utterances produced by three children acquiring Quechua as their first language. The naturalistic speech of these children, ranging in age from 2;5 years to 3;5 years, was recorded in their home community of Chalhuanca

(Caylloma Province) in the department of Arequipa, Peru. The recordings yielded a total corpus of 640 utterances with at least two of the three canonical constituents, i.e. subject, verb, and complement. (In the following discussion, the term "complement" is used very loosely to refer to any case-marked nominal constituent, including objects, directional expressions, and adjuncts.) The youngest child, Ana, was recorded for approximately eleven hours between the ages of 2;5 and 2;10 years, yielding 336 utterances. For the purpose of analysis, these utterances are considered in three groups distributed according to age: 2;5-2;6 years; 2;7-2;8 years; and 2;9-2;10 years. (This division serves to elucidate the rapid, dramatic changes observed in the speech produced by this child over the six-month recording period.) The two older children, Hilda (2;10 to 3;1 years) and Ines (3;2 to 3;5 years), were each recorded for approximately five hours. Recordings of these children yielded 145 utterances for Hilda and 159 utterances for Ines.

Analysis of the speech samples reveals that all three children highlighted utterance-initial elements by repeating them at the very end. They duplicated subjects, verbs, and different types of complements. Even the earliest utterances produced by Ana at ages 2;5 to 2;6 years exhibited duplicative emphasis of diverse constituent types. Examples (15)-(19) all show instances of duplicated subjects in the children's utterances.

15. Ana (2;5-2;6)     Noqa ma\_cha-ku-sa\_ noqa.

I    fear    Refl 1 fut    I

'I am afraid.'

16. Ana (2;6-2;7)     Lokacha calle-pi lokacha.

Crazy    street-Loc    crazy

'The crazy one is in the street'

17. Ana (2;9-2;10) Awilita mana ranti-pu-wa-n-chu mamachi.

Grandma Neg buy Ben 1 obj 3 Neg grandma

'Grandma didn't buy (it) for me.'

18. Hilda (2;10-3;1) Chay - lla saya - sha - n chay - lla.

That-Delim stand Prog 3 that-Delim

'Just that one is standing.'

19. Ines (3;2-3;5) Qan - qa wayk'u - nki qan - qa.

You-Top cook 2 sg you-Top

'You will cook.'

Utterance (17) is intriguing, since the final element is actually a synonym of the first, rather than an exact replicate. Utterances such as these suggest that highlighting through end repetition is a purely pragmatic strategy, since there is no way to account for such synonymic duplication syntactically. In addition to subjects, all three children duplicated different types of complements. This is shown in (20)-(24).

20. Ana (2;5-2;6) Duplication of Accusative Object:

Sara - ta mama - y apa - ku - sha - n sara - ta.

corn Acc mom-1 poss take Refl Prog 3 corn Acc

'My mom is taking the corn.'

21. Ana (2;7-2;8) Duplication of Dative Object:

Tata - y - man toka - chi - saq tata - y - man.

Dad 1 poss Dat play Caus 1 fut dad 1 poss Dat

'I'll make my dad play (it).'

22. Ana (2;9-2;10) Duplication of Directional Complement:

Chay kay - ta hamu - sha - n kay - ta.

That this Acc come Prog 3 this Acc

'That is coming here.'

23. Hilda (2;10-3;1) Duplication of Accusative Object:

Pakocha - ta - n ruwa - saq pakocha - ta.

Alpaca Acc Ev do 1 fut alpaca Acc

'I'll tend the alpacas.'

24. Ines (3;2-3;5) Duplication of Infinitival Complement:

Graba-ku-y-ta muna-ni kay-ta graba-ku-y-ta ni-n.

Tape-Refl-Inf-Acc want-1 sg this-Acc tape-Refl-Inf-Acc say-3

'He said, "I want to tape this." '

In this sequence, (24), produced by the oldest child, is especially interesting since the duplicated infinitive occurs within the embedded sentential complement of the verb *ni-* 'say'. All three children also highlighted verbs through duplication. The utterances in (25)-(27) are among those produced by Ana at different ages.

25. Ana (2;5-2;6) Pasa - n calli - pi pasa - n.

Pass 3 street-Loc pass 3

'He passes in the street.'

26. Ana (2;7-2;8) Puklla - sa noqa puklla - sa.

Play 1 fut I play 1 fut

'I'll play.'

27. Ana (2;9-2;10) Qhawa-chi-sun chay-ta-qa Aurora-man qhawa-chi-sun.

Look-Caus-1 pl fut that-Acc-Top Aurora-Dat look-Caus-1 pl fut

'Let's show that to Aurora.'

Finally, we find utterances produced by all three children with entire phrases duplicated at the end. These present an enormous challenge to syntactic accounts of the duplication phenomenon, since it appears not to matter whether the subject or the complement is paired with the verb for duplicative highlighting. That is, a speaker might choose to emphasize either S-V or C-V, with the remaining, nonduplicated constituent(s) relegated to the background. This is shown in (28)-(30) below.

28. Ana (2;9-2;10) Qolqe-ta qo-wa-n mana qolqe-ta qo-wa-n.

Money-Acc give-1obj-3 Neg money-Acc give-1obj-3

'He doesn't give me money.'

29. Hilda (2;10-3;1) Ahina ka - sqa pakocha-qa ahina ka - sqa.

Thus be-Result alpaca Top thus be-Result

'The alpaca was that way.'

30. Ines (3;2-3;5) Oso puri-sha-n carretera-nta oso puri-sha-n.

Bear walk-Prog-3 highway-along bear walk-Prog-3

'The bear is walking along the highway.'

In (28), Ana has duplicated the entire Verb-Object complex, which she has attempted to negate by inserting the Negative form *mana*. In (29), it is the VP which Hilda has repeated; that is, the verb and its modifier, *ahina* 'thus'. Finally, in (30), Ines has duplicated Subject+Verb, without repeating the directional complement of the verb, *carreteranta* 'along the highway'. One wonders how Minaya and Luján's two-headed VP could account for utterances such as these. Indeed, how would *any* purely syntactic analysis explain this type of duplication?

## Concluding remarks

The foregoing analysis establishes duplication as a pragmatic strategy available in Quechua discourse for highlighting a variety of sentence constituents. It then comes as no surprise that Quechua-speaking children should transfer this strategy to Spanish. First, there is ample evidence in the literature on second language acquisition that learners commonly transfer L1 discourse and pragmatic features to the second language (e.g. Rutherford 1983, Kasper 1992). Rutherford, for example, has asserted that Japanese learners of English transfer both topic prominence and pragmatic word order.<sup>3</sup> Second, we have seen that even very young Quechua speakers highlight elements through duplication, and they must wish to emphasize or focus constituents when they speak Spanish. The means available to Spanish speakers for focusing constituents are no doubt difficult to acquire: clefted structures and clitic doubling, for example, must require considerable morphosyntactic competence. Examples of clefting and clitic doubling are shown in (31) and (32), respectively.

31. Es a Juan a quien yo quiero.

'It is JUAN that I love.'

Es ese vestido que yo me voy a poner.

'It is THAT DRESS that I'm going to put on.'

32. Yo te quiero a ti.

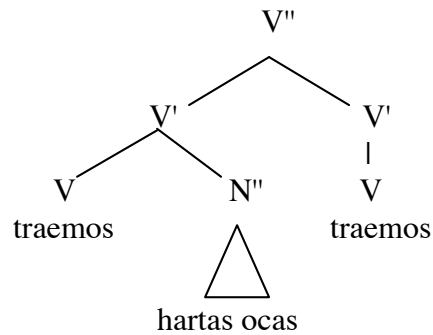
'I love YOU.'

Before children acquire these devices, they may very well resort to the pragmatic strategies available to them in their native language, Quechua.

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<sup>3</sup> Preliminary reports from native-speaking informants of Japanese and Korean, both rigidly verb-final languages, suggest that a limited set of constituent types may be duplicated after the verb for emphasis in informal speech. A native speaker of Turkish, a verb-final language with flexible ordering of major constituents, has informed this writer that reduplication of varied constituent types occurs quite commonly in everyday Turkish speech.

This is a felicitous outcome: it means abandoning the premise that children have a grammar that violates universal syntactic principles. The Minaya and Luján VP configuration, modified below in line with X-Bar Theory, clearly treads on accepted phrase structure principles.



As mentioned earlier, within a GB approach, the configuration is unacceptable on a number of counts. In a minimalist framework (Chomsky 1995), the representation also falls short. Which verb adjoins to the head of a higher projection for checking of the Accusative Case feature on the direct object NP? Which verb moves up for the checking of tense features? Fortunately, we may now dispense with this representation altogether.<sup>4</sup>

Clearly, as one examines the interlanguage produced by speakers of languages in contact, one must carefully consider native language phenomena before attributing to L2 learners wild grammars based on "interdeterminacy" in word order.

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<sup>4</sup> While repetition of constituents is a pragmatic strategy available to speakers of Quechua for emphasis, there may well be syntactic constraints on such reduplication, very worthy of future exploration. For example, both sentences below might be glossed 'I want Juan to BUY potatoes'. (Lit: '[[Juan potatoes buy] want-1 sg buy.]')

- (a) [Juan papa-ta ranti-na-n-ta] muna-sha-ni ranti-na-n-ta.
- (b) [[Juan papa-ta ranti-nqa] chay-ta] muna-sha-ni \*ranti-nqa.

Informants assert that duplication of the lower verb *ranti*- 'buy' is possible only in (a), where the verb occurs in nominalized form. In (b), the verb is inflected in 3rd person singular, future tense, and it occurs within a finite clause ending in *chay*. Following Lefebvre and Muysken (1988), *chay* is a complementizer which blocks extraction from the lower finite clause. It may be that duplication of constituents occurring within embedded CPs is also blocked.

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