

# Nominal Number Marking in a Variety of Spanish in Contact with Portuguese

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## 1. Introduction

Although Spanish and Portuguese normative grammars mandate obligatory nominal number agreement, elision of syllable-final /s/ in both languages affects Noun Phrase (NP) agreement, since the primary morphological marker of plurality is /s/. As a consequence, nominal number agreement is variable and subject to linguistic and extra-linguistic conditioning. This variable rule has been extensively studied in both languages and comparisons of variation patterns in Brazilian Portuguese and Caribbean Spanish have been drawn by Guy (1981), Ferreira (2001) and Scherre (2001a, 2001b), whose studies reveal striking similarities and very few differences between these languages.

Accordingly, the bilingual varieties of Spanish and Portuguese spoken in the northern communities of Uruguay also present occasional deletion of plural marking. Example 1 illustrates lack of plural marking in the second element of the noun phrase in Uruguayan Portuguese, and example 2 illustrates the same phenomenon in Uruguayan border Spanish.<sup>1</sup>

(1) Os            *guri*∅    nunca   pára    de jogá. (middle-class adult woman, Rivera)  
‘the (pl.)    kid (sg.)    never    stop    playing’

(2) Loh            *sueldo*∅        son        bajos. (middle-class adolescent woman, Rivera)  
‘the (pl.)        salary (sg.)        are        low (pl.)’

Hensey (1982b) and Elizaincín et al. (1987) study noun phrase agreement in Uruguayan Portuguese and conclude that this variety follows the tendency found in Brazilian Portuguese, where this rule is very advanced. Naro (1981) explains that in fact, nominal number agreement is undergoing a process of elimination from Brazilian Portuguese grammar as part of a general tendency of consonantal deletion in syllable final position.

Although Uruguayan Portuguese’s internal variation has been extensively studied by several authors (Carvalho 2003a, 2003b, 2004, Elizaincín 1979, 1988a, 1988b, 1992, Elizaincín & Behares 1981, Elizaincín et al. 1987, Hensey 1972, 1982a, 1982b), the variety of Spanish spoken in these bilingual border communities has not been investigated.<sup>2</sup> The purpose of this paper is to study the linguistic and extra-linguistic factors that condition number marking within the elements of the noun phrase in the Spanish of bilinguals in Rivera, Uruguay. Based on differences found between Portuguese and Spanish in previous studies, this paper aims at discussing whether border Spanish in bilingual speakers diverges from its monolingual counterparts by borrowing from Portuguese. Following the variationist framework of linguistic analysis, these results will demonstrate that while border Spanish follows the internal tendencies of the Spanish language, which largely coincide with

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\* I would like to thank Marta Scherre for commenting on an earlier version of this paper. Any inconsistencies found in this article are mine.

<sup>1</sup> All examples are extracted from the corpus under study, unless stated otherwise, and followed by the socioeconomic class, age cohort, sex and town of the informant.

<sup>2</sup> Exceptions are the works of Behares and Elizaincín (1983) and Elizaincín and Barrios (1989) which briefly describe some aspects of rural border Spanish.

the internal tendencies of Portuguese, it also presents elements that are the result of language contact and are thus unique to this variety.

## 2. Data collection

This analysis is based on data collected during six months in the town of Rivera in 1996. Rivera presents an ideal context for the study of variation and change resulting from contact between similar languages. A border town on the northeastern part of Uruguay, Rivera presents a case of societal bilingualism where Spanish and Portuguese have been in contact since colonial times, when Spanish was imposed on Portuguese-speaking communities through state educational policies and language planning (Behares 1987, Elizaincín 1976, 1978, 1980, 1992, Elizaincín et al. 1987). Today bilingualism is widespread and to a certain extent is diglossic: Spanish is the language of school and public life, whereas Portuguese is employed as a vernacular in in-group interactions (Behares 1984, Carvalho 2005, Elizaincín 1992).

The data corpus on which this analysis is based consists of speech elicited during tape-recorded interviews with 56 participants and intense participant-observation of the community's linguistic practices. The interviewees are grouped according to their socioeconomic status<sup>3</sup> (working, low-middle, middle-middle) age (15-29, 30-49, 50-70 years old) and gender, categories which were determined based on the community's current configuration, social history and extensive discussion with community members. All participants were balanced bilinguals born and raised in Rivera, who grew up speaking both languages. The first interview with each participant, which comprises the basis of this analysis, was carried out entirely in Spanish, and was followed by an interview in Portuguese at a later date.

Most of the interviews were conducted in the homes of the participants, and in a few cases, at their workplace. The goal of the interviews was to record as much free conversation as possible. With this goal in mind, several techniques were used, e.g., the participants had the right to choose the topic and ask questions, lengthy narratives were encouraged, frequent eye contact between the interlocutors was attempted to minimize the awareness of the recording and subjects such as soccer and soap operas were often suggested and discussed. To access stylistic differences, a reading passage was used to capture participants' most formal styles, following Labov's (1972) approach to stylistic variance according to the amount of attention paid to speech.

## 3. The analysis

2,709 tokens were extracted from the interviews and coded for the absence of a plural marker or its realization as either a sibilant or an aspirated phone. Each element of the NP was treated as a token, including determiners, adjectives and nouns. Deletion of the plural marker applied to 719 tokens, or 26% of the time, which very closely resembles the 29% deletion rate found in Brazilian Portuguese by Scherre (2001a). All tokens were coded for social, phonological and syntactic factors, and analyzed using the statistical package Varbrul 2S for PC. Ten factors were considered in the analysis: 1 stylistic (reading or conversation), 3 social (age, gender and socioeconomic group), 4 phonological (stress, phonic saliency, number of syllables and following segment) and 2 syntactic (linear and relative position and preceding markers across linear position).

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<sup>3</sup> Socioeconomic status was measured based on a composite index where 3 factors were taken into consideration: average household income, occupational status, and level of education. The weight of each factor was, respectively, 0.5, 0.4, and 0.3. Scores from each factor were multiplied by the factor's weight, and then added together. Once the overall scores were computed, it was possible to divide the sample population into discrete socioeconomic categories. Conclusions regarding these categories were reviewed and confirmed by several community members.

### 3.1 Social factors

Among the extralinguistic factors coded for Varbrul, (style, socioeconomic group, age and gender), gender was eliminated by the analysis because it presented no significant contribution to the application of the rule. Table 1 summarizes the results obtained from Varbrul.

Factor	Factors	Percent of Plural Markers	Total N of tokens	Factor Weight	Factor Rank
Style	Reading	91% (126)	138	0.80	1
	Conversational	72% (1864)	2571	0.48	
Socio-Econ. Group	Mid-middle	82% (770)	939	0.62	2
	Lower-middle	73% (679)	926	0.49	
	Low	64% (541)	844	0.37	
Age	16-29	74% (746)	995	0.53	3
	30-49	75% (552)	733	0.53	
	50-70	70% (692)	981	0.44	

N=2,709

Table 1: Social conditioners of plural marking within the NP (gender eliminated from the analysis)

The numbers in Table 1 are transparent in showing a clear pattern of stratification. Style, as expected, is the most important factor: while the reading style presents a very high probability of 0.80 for the realization of the plural marker, the conversational style presents a nearly neutral value of 0.48. Across socioeconomic groups, members of the highest group in the sample are the only ones to show a positive probability that plurality will be marked, 0.62. Members of the lower-middle group demonstrate a neutral value of 0.49, and the lowest group, formed by the working class, shows a strong negative probability of marking plurality in every single element of the NP, of 0.37. Finally, the age variable did not show much stratification, as all probabilities are near 0.5, hinting at stable stratification, not a change in progress. In Brazilian Portuguese, the probability weights for age groups presented by Scherre and Naro (1998) are remarkably similar to the ones found for Uruguayan border Spanish, as illustrated in Table 2.

	16-29 years-old	30-49 years old	50-70 years old
Rio de Janeiro Portuguese	0.5	0.55	0.48
Uruguayan border Spanish	0.53	0.53	0.44

Table 2: Results for rate of plural marking within the NP according to age groups in Rio de Janeiro Portuguese and Uruguayan border Spanish

The social stratification of plural /s/ deletion in Uruguayan border Spanish mirrors that found in other varieties of Spanish by Lafford (1982), Terrell (1986), Cepeda (1990, 1995) and Matteo (2002) among others. This similarity allows us to conclude that this variation is stable in both languages. Most of these studies of both Portuguese and Spanish, however, detect gender stratification where women will tend to use plural marking more than men. It is not clear why this pattern did not emerge in my study.

### 3.2 Phonological factors

The phonological factors considered in the variable rule analysis were the following (examples are given in parenthesis).

- Stress of the singular form: stressed (*café*) and unstressed (*libro*)
- Phonic saliency: greater differentiation (*mujeres*) and minor differentiation (*hombres*)
- Number of syllables: monosyllabic (*las*), disyllabic (*chicas*), polysyllabic (*bonitas*).
- Following segment: consonant (*las chicas*), vowel (*las amigas*), pause (*amigas*).

In the final run, when Varbrul provided the best model, the group factors stress and phonic saliency were eliminated. The only factors considered by Varbrul were number of syllables in the word and the following segment, as illustrated in Table 3.

Factor Groups	Factors	Percent of Plural Markers	Total N of tokens	Factor Weight	Rank
Number of Syllables in the Word	1	94% (687)	724	0.70	1
	2	62% (707)	1129	0.36	
	3	69% (596)	856	0.46	
Following Segment	Pause	74% (294)	395	0.60	2
	Vowel	73% (325)	440	0.54	
	Conson.	73% (1371)	1874	0.46	

N=2,709

Table 3: Phonological conditioners of plural marking within the NP (phonetic saliency and syllable stress eliminated from the analysis)

Number of syllables was the first phonological factor chosen by Varbrul. Monosyllabic segments tend to retain plural /s/ with a high probability of 0.70, while two-syllable words show the opposite tendency, with the negative probability of 0.36. Words with three syllables also show a negative probability of retaining the marker, although being slightly higher than the disyllabic words and close to the neutral .5. Word length has repeatedly been detected as significant in the realization of this variable, since monosyllabic words will tend to retain final /s/ perhaps, as Lipksi (1984) explains, in order to avoid excessive phonic erosion. In addition, the following segment proved to be significant as well, and the tendency to retain plural /s/ before pause, seen in several other studies of Spanish and Portuguese, is also detected in this variety. The only segment that somewhat favors the elimination of plural /s/ is a following consonant, which is yet another correspondence with the pattern found by Guy (1981) and Campos and Rodrigues (1993) in Brazilian Portuguese and by Poplack (1980) in Puerto Rican Spanish. In addition, it is interesting to note that the effect of phonic saliency does not apply for border Spanish. This effect was first studied by Naro (1981) in Brazilian Portuguese, who demonstrated that increasing opposition between the singular/plural forms correlated to higher chances of agreement. He adopted two measurements of phonic saliency, which were reproduced here: stress and material differentiation in singular/plural opposition. However, because these two variables were discarded by Varbrul one can state that Uruguayan border Spanish does not follow the tendency attested for Brazilian Portuguese by Naro (1981) and Scherre (1994, 2001a, 2001b) that more phonic material differentiation favors plural markers. The lack of strength of the saliency variable found here may be a result of the fact that border Spanish presents fewer cases of plural morpheme stripping than Portuguese, as will be discussed in section 3.4.

### 3.3 Syntactic factors

Data were coded for two syntactic variables: linear and relative position within the NP and preceding markers across linear position.

#### 3.3.1 Linear and relative position within the NP

Linear position in the NP has been proven to correlate to the realization of plural marking in several dialects of both Spanish and Portuguese. All studies agree that plural marking is nearly categorical in first positions and then declines in each subsequent linear position to the right. In Spanish, the works of Ma and Herasimchuk (1971), Cedergren (1978), Terrell (1975), López Morales (1980), Poplack (1981), Lafford (1989), and De Granda (1978) show that the lowest rate of deletion is found in the first element in the noun phrase. The same pattern has been found for Brazilian Portuguese in the studies of Braga (1977), Scherre (1988), Guy (1981), Azevedo (1989) and Campos and Rodrigues (1993). However, in 1989, Scherre's insightful analysis of nominal plural marking in Rio de Janeiro Portuguese challenged the initial linear view of agreement and proved, instead, that it is not only the element in the first linear position that is most frequently marked, but all pre-head elements, be they in first or second position. In order to reduplicate Scherre's study and compare our results with hers, I coded my data according to the linear and relative position within the NP as follows:

##### 3.3.1.1 Pre-head nominal elements

- Pre-head in position 1: *las casas*, 'the houses'
- Pre-head in position 2: *las lindas casas*, 'the beautiful houses'

##### 3.3.1.2 Post-head nominal elements

- Post-head in position 2: *niños lindos*, 'children beautiful'
- Post-head in other positions: *los niños lindos*, 'the children beautiful'

##### 3.3.1.3 Head across positions

- Head in position 1: *niños lindos*, 'children beautiful'
- Head in position 2: *los niños lindos*, 'the children beautiful'
- Head in other position: *los lindos niños*, 'the children beautiful'

The results, given in Table 4, show that pre-head elements in both positions 1 and 2 retain plural marking at a rate of approximately 0.7. These probability weights are very similar to the ones found by Cepeda (1995) in Chilean Spanish and by Scherre (1988, 1994, 2001a, Naro & Scherre 1993, Scherre & Naro 1998) in Carioca Portuguese. Also similar to other varieties of Spanish and Portuguese is the opposite tendency of post-head elements to lack overt plural marking, since in our data post head in positions 2 and 3 present negative probabilities that they will carry plural markings of 0.47 and 0.23. Consequently, in both languages and in border Spanish, it is reasonable to agree with Scherre that "all pre-head elements show a very high rate of presence of plural markers, while all post-head elements are much less marked" (2001a:3).

These results support evidence to Scherre's position that it is not the determiner which resists deletion more than the noun, since it is clear that the head itself favors over plural markers as long as it is more to the left of the noun phrase, with a probability of 0.64. Otherwise, the head disfavors markers, with very low probabilities of 0.29 and 0.21. Thus, Uruguayan border Spanish follows the pattern suggested by Scherre that "elements occurring to the left of the head are marked more frequently than the elements to the right of the head. For the head itself, the left most category also favors overt plural marking, and the other positions disfavor it" (2001a:4).

Pre-head in position 1 995/1044=91% 0.71	Pre-head in position 2 86/96=89% 0.69	
Head position 1 227/259=87% 0.64	Head position 2 566/1035=54% 0.29	Head in other positions 79/155=50% 0.21
	Post-head in position 2 42/54=77% .47	Post-head in other positions 35/66=53% .23

N=2,709

Table 4: Results for rate of plural marking within the NP according to linear and relative position

The discrepancy between a very low plural marking deletion rate in pre-head and head elements in first position and a very high deletion rate in heads in second position has led several researchers to look into a functional explanation, since it is obvious that if a noun has had its plurality previously determined (as nouns in the second position do), the plural information may be deleted because it is redundant. Following Kiparsky's (1982) functional hypothesis that there is a tendency for semantically relevant information to be retained, and less relevant information to be dropped, several authors examined functionalism as an explanation for the retention of plurality in the first element of the Noun Phrase, such as Lafford (1989) and Ranson (1993).

Nevertheless, Poplack's study (1981) of nominal agreement in Puerto Rican Spanish found a tendency that was contrary to the functional hypothesis. She showed that the presence of a plural marker before the token favors retention of a marker on that token, whereas the absence of a preceding marker favors more deletion. Poplack noticed that this pattern directly contradicts the principle of linguistic economy, since plural marking tends to occur in contexts in which it is most redundant, and tends not to occur in contexts in which its informative function is more necessary. Scherre (1988) reduplicates Poplack's study by considering the same variables for Brazilian Portuguese and reaches very similar results, that is, that in Portuguese, also contrary to the functional hypothesis, redundancy is favored, since one marker leads to more, and the deletion of a marker leads to further deletions. In her comparison of Brazilian Portuguese and Caribbean Spanish, Scherre (2001a) concludes that in both Spanish and Portuguese, noun phrase agreement is subject to a parallel processing effect, a universal tendency to repeat similar grammatical forms.

### 3.3.2 Preceding markers across linear positions

In order to test the parallel processing effect versus the functional hypothesis in Uruguayan border Spanish, and compare it to Poplack's and Scherre's results, the current data were coded according to the preceding markers across linear position, following Scherre (2001a). Note that S indicates a preceding overt plural marker, Ø indicates a zero plural marker, and N represents a numeral or any lexical item that carries plurality meaning, including those that remain plural even after /s/ dropping (*loØ, esoØ, mujereØ*).

- S\_                    *las casa\_*                    'the houses'
- the (pl.) house
- Ø\_                    *laØ casa\_*                    'the houses'
- the (sg.) house

- ØØ\_            *laØ casaØ linda\_*            ‘the beautiful houses’  
the (sg.) house (sg.) beautiful
- SS\_            *las casas linda\_*            ‘the beautiful houses’  
the (pl.) house (pl.) beautiful
- SSS\_           *las casas lindas nueva\_*            ‘the new beautiful houses’  
the (pl.) house (pl.) beautiful (pl.), new
- SØ\_            *las casaØ linda\_*            ‘the beautiful houses’  
the (pl.) house (sg.) beautiful
- ØS\_            *laØ casas linda\_*            ‘the beautiful houses’  
the (pl.) house (pl.) beautiful
- SSØ\_           *las casas lindaØ nueva\_*            ‘the beautiful new houses’  
the (pl.) house (pl.) new
- SØØ\_           *las casaØ lindaØ roja\_*            ‘the beautiful red house’  
the (pl.) house (sg.) beautiful (sg.) red
- N\_            *cuatro casa\_*            ‘four houses’  
four house
- NS\_            *cuatro grandes casa\_*            ‘four big houses’  
four big (pl.) house
- NØ\_            *cuatro grandeØ casa\_*            ‘four big houses’  
four big (sg.) house
- NSS\_           *cuatro grandes casas roja\_*            ‘four big red houses’  
four big (pl.) house (pl.) red
- SN\_            *las cuatro casa\_*            ‘the four houses’  
the (pl.) four house
- ØN\_            *laØ cuatro casa\_*            ‘the four houses’  
the (sg.) four house
- SNS\_           *las cuatro casas grande\_*            ‘the four big houses’  
the (pl.) four house (pl.) big
- SNØ\_           *las cuatro casaØ grande\_*            ‘the four big houses’  
the (pl.) four house (sg.) big

Table 5 presents the results for the rate of the plural marker within the NP according the factors described above.

Marker preceding analyzed token	Example	Frequency	Factor Weight
S_	Las casa_	535/922=58%	0.49
SS_	Las casas nueva_	67/105=63%	0.69
SØ_	Las casaØ nueva_	0/16=0%	knock-out
SSØ_	Las casas grandeØ amarilla_	1/2=50%	0.59
SSS_	Las casas nuevas amarilla_	2/2=100%	knock-out
N_	Cuatro casa_	114/212=53%	0.44
NS_	Cuatro casas grande_	5/16=31%	merged with ØS_
NØ_	Cuatro casaØ grande_	1/5 = 20%	0.18
SN_	Las doce casa_	47/70=67%	0.63

NSS_	Cuatro casas grandes amarilla_	1/2= 50%	merged with NS_
SNS_	Las cuatro casas grande_	1/1= 100%	knock-out
Ø_	UnaØ casa_	27/57=47%	0.34
ØS_	UnaØ casas nueva_	13/37=35%	0.5
ØN_	LaØ doce casa_	0/5=0%	knock-out
ØØ_	LaØ casaØ nuevaØ	0/1=0%	knock-out
SØØ_	Las casaØ grandeØ amarilla_	0/1=0%	knock-out

N=2,709

Table 5: Rate of plural marker within the NP according to preceding markers across linear position

Table 6 presents a summary of Table 5, excluding knock-outs and the merging of some of the factors with insufficient tokens.

	Uruguayan border Spanish	Puerto Rican Spanish (Poplack 1981)	Brazilian Portuguese (Scherre 2001a)
S_	tokens preceded by	0.49	0.56
SS_	/s/ marker strings	0.69	0.60
Ø_	tokens preceded by	0.34	0.48
SØ_	first or second position	knock-out	0.32
ØS_	zero plural markers	0.5	0.48
N_	tokens preceded by	0.44	
SN_	semantic plurals	0.63	
NØ_		0.18	

Table 6:<sup>4</sup> Summary of contribution of preceding markers across linear position to the presence of plural /s/ in Uruguayan border Spanish, in addition to probability weights in Puerto Rican Spanish (Poplack 1981) and in Brazilian Portuguese (Scherre 2001a)

According to Varbrul weights in Table 6, it is correct to state that in Uruguayan border Spanish, if a second element is preceded by a plural marker, it has a nearly neutral probability of carrying another marker (0.49). However, if a token is preceded by two plural markers, it has a positive probability of .69 to carry another marker. These probability weights are surprisingly similar to those found in Puerto Rican Spanish by Poplack (1981) and in Brazilian Portuguese by Scherre (2001a), as illustrated in Table 6. Results for border Spanish support the explanation given by these authors that plural marking within a NP follows the universal tendency for similar forms to occur together within a part of discourse. Likewise, the absence of a plural marker will most likely favor the absence of another plural marker in the noun phrase, as the probability of a plural marker to appear after the absence of a marker is low (0.34). In all cases where the token is preceded by a plural /s/ followed by the absence of a marker, a plural marker was not realized, a tendency also detected by Poplack and Scherre, who found very low probabilities for an overt plural marker to occur in this context. Nevertheless, if preceded by the absence of a marker and the presence of a marker, the probability of marking plurality increases to

<sup>4</sup> 1,299 tokens in the first position of the string were coded as 'doesn't apply' in the factor group.

a neutral value, 0.5. After a numeral or any other semantically plural lexical item, it is likely that plurality will not be marked as shown by a negative probability weight of 0.44, because there is no realization of a plural /s/ that would trigger another /s/, and plurality has already been marked, a pattern also found in Montevidean Spanish by Matteo (2002). However, and contrary to any functionalist explanation, if /s/ is present before the numeral, the probability that another /s/ will be produced increases up to 0.63, but if a Ø marker is present between the numeral and the token, the probability that a plural /s/ will be produced is reduced to 0.18. Again, these results bear striking similarity with results given by Scherre for Portuguese and Poplack for Spanish and add evidence to their argument that in both languages, noun phrase agreement is subject to the parallel processing effect.

### 3.4 Plural stripping

As already mentioned the current analysis of the stylistic, social, phonological and syntactic factors that condition /s/ plural marking in Uruguayan border Spanish resembles very closely the results of previous studies of this variable in other varieties of Spanish and Portuguese. Nevertheless, Spanish and Brazilian Portuguese differ in that Portuguese presents the peculiarity of plural stripping, e.g., the dropping of the entire plural morpheme in words which require irregular plurals (words ending in /l/, /s/, /r/ and nasal diphthongs). While Spanish may retain plural information in such words due to the omission of /s/ only but the retention of the vowel (*flores* – *flore*, ‘flowers’), the dropping of the entire plural morpheme (*flor*, ‘flowers’) is extremely common in Brazilian Portuguese. Example 3 illustrates it.

- (3) Depois que as mulherØØ chegaram todo mundo entrou. (middle-class, adult, man, São Paulo, Brazil)  
 ‘after the (pl.) womanØØ (sg.) arrived, everybody came in’

The high frequency of plural morpheme stripping led Guy (1981) to suggest that in Brazilian Portuguese, plural /s/ elision is morphosyntactically rather than phonologically induced. The reasoning is that the total absence of plurality is due to failure to apply the agreement rule, rather than purely due to /s/ elision. Plural stripping has been detected in Portuguese texts as early as the sixteenth century (Lipski 1999:63). It is a very frequent vernacular feature in the colloquial speech of Brazilians of all social strata (Azevedo 1989) and in Uruguayan Portuguese (Carvalho 2003a, 2003b, 2004, Elizaincín 1992, Elizaincín et al. 1987, and Hensey 1982b). In Uruguayan Portuguese, examples like number 4 are abundant.

- (4) Chamei um senhor que me reforçasse esse latão porque são uns latão fininho (working-class, adult woman, Rivera)  
 ‘I called a man in to reinforce this metal because they are a (pl.) thinØ(sg.) tinØØ(sg.)’

In example 4 the speaker marks plurality in the first segment of the noun phrase, *uns* (‘a’, pl.), but keeps the singular form in the second, *latão* (‘tin’, sing.), since the plural counterpart would require a change from the singular nasal diphthong *-ão* to the plural *-ões* in standard Portuguese. The presence of plural stripping in Uruguayan Portuguese lead Hensey (1982b) to conclude that this variant is a valid indicator that Uruguayan Portuguese applies rules attested for Brazilian Portuguese, not Uruguayan Spanish.

This is a major contrast between Spanish and Portuguese, since only /s/ deletion is attested in the latter. Data on Montevidean Spanish provide us with the following example of deletion of /s/ but retention of plurality due to the presence of /e/ in *morale*.

- (5) Lo/h/ principio/s/ moraleØ (high middle-class, woman, adult, Montevideo)  
 The (pl.) principles (pl.) moral (pl.)  
 ‘The moral principles’

Nevertheless, in the NPs analyzed in Uruguayan border Spanish, several instances of plural stripping were found. Out of 191 contexts for irregular plural morphemes, 71% of the time the whole morpheme was kept, in 16% the vowel, thus, plurality, was maintained, but in 12% of the cases the whole morpheme was dropped. Some of these tokens are illustrated in examples 6, 7, 8 and 9.

- (6) Lo/h/ camiónØØ/ llegan el sábado. (lower-middle class, adult man, Rivera)  
The (pl.) truckØØ (sg.) arrive (pl.) on Saturday.  
'The trucks arrive on Saturday'
- (7) Todo los mesØØ (working-class adult man, Rivera)  
Every the (pl.) monthØØ (sg.)  
'Every month'
- (8) Toda/s/ la/s/ ciudadØØ (working-class, adolescent woman, Rivera)  
Every (pl.) the (pl.) cityØØ (sg.)  
'Every city'
- (9) Son cinco lugarØØ (lower-middle class, adult man, Rivera)  
Are five placeØØ (sg.)  
'they are five places'

The relatively low percentage (12%) of cases where plural stripping occurred is not unexpected. First, it appears to be a feature of 'focused' border Spanish, or a variety that contains several nonstandard, local features (Carvalho 2003a, 2003b), and as such, avoided during interviews, which usually trigger a less informal style. Second, contexts where plural stripping may apply (words that require irregular plurals) are said to be the ones that strongly favor plural retention in Brazilian Portuguese (Scherre & Naro 1998), thus, one should expect the same in Uruguayan border Spanish. Nevertheless, although there are only a few tokens showing this occurrence, these realizations appear to correlate with socioeconomic factors, since a clear social stratification of the distribution was detected, as shown in Table 7.

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mid.middle	3/24= 12%
low.middle	7/24= 29%
lower	14/24=58%

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Table 7: Plural morpheme stripping in Uruguayan Border Spanish across socio-economic groups

Even though there are only a few tokens and more analysis is in order, the higher frequency of this rule in the speech of the lower socioeconomic group lends support to Carvalho's interpretation of this bilingual community where the middle class tends to diffuse its border dialects towards their standard models, the monolingual urban varieties. This is the group that has also been identified as speakers of a more local and less standard Portuguese variety (Carvalho 2003a, 2003b, 2004).

This may be the only variety of Spanish that shows the application of such a morphological rule, as /s/ deletion in Spanish is believed to be mainly phonologically motivated. It is noteworthy that the borrowing of this Portuguese rule into Spanish does not entail a radical change in the recipient language, since it coincides with its internal tendency to lose syllable-final /s/, which, in many cases, results in loss of plural information. Thus, this borrowed feature is incorporated relatively easily into Spanish, due to a high degree of integration that results from a high level of congruency of grammatical and variational patterns. In this case, the application of a Portuguese rule pushes toward the loss of nominal agreement already common in Spanish, primarily caused by the loss of the /s/ phoneme.

## 4. Conclusion

In conclusion, this analysis has shown that border Uruguayan Spanish follows similar tendencies demonstrated in other monolingual varieties of Spanish. In addition, it discusses studies that compare Spanish and Portuguese NP plural marking and reveals that the same linguistic and extralinguistic factors that condition this variable in other varieties of Spanish and Portuguese also condition it in Uruguayan border Spanish. This parallelism is well illustrated by highly similar probability weights given to the syntactic factors conditioning overt NP plural marking. An exception to this pattern is the presence of plural morpheme stripping, a rule transferred from the Portuguese of bilinguals. Grammatical congruency between these two languages in addition to two centuries of contact in this border community allow for the borrowing of a rule that corresponds to an internal tendency already found in the receiving language, factors which are believed to facilitate the incorporation of grammatical borrowings (Appel & Muysken 1987, Thomason & Kaufman 1988). However, further quantification of more tokens is necessary for a more precise understanding of the social stratification of plural stripping, and its possible role as a marker of border sociocultural identity.

Future research on nominal agreement in border Spanish should take into account the parallel processing at discourse level, a variable demonstrated to be relevant by Scherre and Naro (1992), whose work evaluates the effect of an entire NP on the following NP in Brazilian Portuguese. In addition, it would be instructive to consider subject-verb agreement in this border variety of Spanish as well. This is a frequent and well-studied variable in Brazilian Portuguese (Bortoni-Ricardo 1985, among others), also detected in Uruguayan Portuguese (Carvalho 2003a, Carvalho 2003b, Elizaincín 1992, Elizaincín et al. 1987, Hensey 1982), but not investigated in Uruguayan border Spanish. Several instances of lack of subject-verb agreement in my corpus of border Spanish hint at the fact that this could be yet another instance of grammatical borrowing from Portuguese, probably subject to similar social and linguistic conditioning. Such studies would contribute to our current understanding of changes induced by the contact of very similar languages as manifested in the form of patterned inter-individual variation, elucidating the role played by internal and external factors underlying these changes.

## References

- Appel, René, and Pieter Muysken. 1987. *Language contact and bilingualism*. London: Edward Arnold.
- Azevedo, Milton. 1989. Vernacular features in educated speech in Brazilian Portuguese. *Hispania* 72.862-72.
- Behares, Luis. 1984. Diglosia en la sociedad escolar de la frontera uruguaya con Brasil: matriz social del bilingüismo. *Cadernos de Estudos Lingüísticos* 6.228-31.
- Behares, Luis. 1987. Frontera, integración social y educación diferencial. *Brecha*, April 30.6.
- Behares, Luis, and Adolfo Elizaincín. 1983. Noticias sobre la fonología del español del Uruguay. *Aproximación al estudio del lenguaje y su patología*, ed. by Katuska Jabiff de Yaffé and Nilia Queirolo, 29-35. Montevideo: Paréntesis.
- Bortoni-Ricardo, Stella Maris. 1985. *The urbanization of rural dialects*. Cambridge, UK: Cambridge University Press.
- Braga, Maria Luiza. 1977. *A concordância de número no sintagma nominal no Triângulo Mineiro*. Rio de Janeiro, Brazil: Pontifícia Universidade Católica Master's dissertation.
- Campos, Odette G. L. de Souza, and Ângela C. S. Rodrigues. 1993. Flexão nominal: indicação de pluralidade no sintagma nominal. *Gramática do português falado*, vol. II: níveis de análise lingüística, ed. by Rodolfo Ilari, 112-34. Campinas: Editora da Unicamp.
- Carvalho, Ana Maria. 2003a. The sociolinguistic distribution of (lh) in Uruguayan Portuguese: a case of dialect diffusion. *Linguistic theory and language development in Hispanic linguistics: selected papers on Hispanic linguistics*, ed. by Silvina Montrul and Francisco Ordóñez, 30-44. Somerville, MA: Cascadilla Press.
- Carvalho, Ana Maria. 2003b. Rumo a uma definição do português uruguaio. *Revista Internacional de Lingüística Iberoamericana* 2.135-59.
- Carvalho, Ana Maria. 2004. I speak like the guys on TV: palatalization and the urbanization of Uruguayan Portuguese. *Language Variation and Change* 16.127-51.
- Carvalho, Ana Maria. 2005. Diagnóstico lingüístico de dos comunidades escolares fronterizas. *Educación bilingüe en Uruguay*, ed. by Nicolás Brian, Claudia Brovetto, and Javier Geymonat, 44-96. Montevideo: Administración Nacional de Educación Pública, República Oriental del Uruguay.

- Cedergren, Henrietta. 1978. En torno de la variación de la S final de sílaba en Panamá. *Corrientes actuales en la dialectología del Caribe Hispánico*, ed. by Humberto López Morales, 35-50. Río Piedras: Editorial Universitaria.
- Cepeda, Gladys. 1990. La variación de /s/ en Valdivia: sexo y edad. *Hispania* 73.232-7.
- Cepeda, Gladys. 1995. Retention and deletion of word-final /s/ in Valdivian Spanish (Chile). *Hispanic Linguistics* 6-7.329-53.
- De Granda, Germán. 1978. *Estudios lingüísticos hispánicos, afrohispanicos y criollos*. Madrid: Gredos.
- Elizaincín, Adolfo. 1976. El bilingüismo en la frontera uruguayo-brasileña. *Letras de Hoje* 20.65-75.
- Elizaincín, Adolfo. 1978. Algunas precisiones sobre los dialectos portugueses del Uruguay. Montevideo: Universidad de la República.
- Elizaincín, Adolfo. 1979. Estado actual de los estudios sobre el dialecto fronterizo uruguayo-brasileño. *Cuadernos del Sul* 12.119-40.
- Elizaincín, Adolfo. 1980. Discriminación en situaciones de contacto lingüístico. *Simposio Internacional de Lengua y Literaturas Hispánicas*, 193-210. Bahía Blanca: Universidad Nacional del Sur.
- Elizaincín, Adolfo. 1988a. Contacto de lenguas y variabilidad lingüística. *Sociolingüística latino-americana*. X Congreso Mundial de Sociología, 39-51. México: Universidad Autónoma.
- Elizaincín, Adolfo. 1988b. Dialectología de los contactos: un ensayo metodológico. *Anuarios de letras de la facultad de filosofía y letras*, Vol. XXVI. México: Centro de Lingüística Hispánica.
- Elizaincín, Adolfo. 1992. *Dialectos en contacto: español y portugués en España y América*. Montevideo: Arca.
- Elizaincín, Adolfo and Graciela Barrios. 1989. Algunas características del español rural uruguayo: primera aproximación. *Ibero-Romania* 30.63-9.
- Elizaincín, Adolfo, and Luis Behares. 1981. Variabilidad morfosintáctica de los dialectos portugueses del Uruguay. *Boletín de Filología de la Universidad de Chile XXXI* 1.401-17.
- Elizaincín, Adolfo; Luis Behares; and Graciela Barrios. 1987. *Nos falemo brasileiro*. Dialectos portugueses en Uruguay. Montevideo: Amersur.
- Ferreira, Fernanda. 2001. *Variation in Ibero-Romance: a study of /s/ reduction in Brazilian Portuguese in comparison with Caribbean Spanish*. Albuquerque: University of New Mexico dissertation.
- Guy, Gregory. 1981. Parallel variability in American dialects of Spanish and Portuguese. *Variation omnibus*, ed. by David Sankoff and Henrietta Cedergren, 85-95. Alberta: Carbondale and Edmonton.
- Hensey, Fred. 1972. *The sociolinguistics of the Brazilian-Uruguayan border*. The Hague: Mouton.
- Hensey, Fred. 1982a. *Uruguayan Fronterizo: a linguistic sampler*. *Word* 33.193-8.
- Hensey, Fred. 1982b. Spanish, Portuguese and Fronterizo: languages in contact in Northern Uruguay. *International Journal of the Sociology of Language* 34.9-23.
- Kiparsky, Paul. 1982. *Explanation in phonology*. Dordrecht: Foris.
- Labov, William. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Lafford, Barbara. 1982. *Dynamic synchrony in the Spanish of Cartagena, Colombia: the influence of linguistic, stylistic and social functions on the retention, aspiration and deletion of syllable and word final /s/*. Ithaca, NY: Cornell University dissertation.
- Lafford, Barbara. 1989. Is functionalism a fact? *Hispanic Linguistics* 3.49-74.
- Lipski, John. 1984. On the weakening of /s/ in Latin American Spanish. *Advances in Hispanic linguistics*, ed. by Javier Gutierrez-Rexach and Fernando Martínez-Gil, 198-213. Sommerville, MA: Cascadilla Press.
- Lipski, John. 1999. *Afro-Hispanic language*. Albuquerque: University of New Mexico, ms.
- López Morales, Humberto. 1980. Sobre la pretendida existencia y pervivencia del criollo cubano. *Anuario de Letras* 18.85-116.
- Ma, Roxana, and Eleanor Herasimchuk. 1971. The linguistic dimensions of a bilingual neighborhood. *Bilingualism in the barrio*, ed. by Joshua Fishman, Robert Cooper and Roxana Ma, 394-464. Bloomington: Indiana University.
- Matteo, Laura. 2002. *Uso de -s en sintagmas nominales plurales. Marcadores sociales en el lenguaje: estudios sobre el español hablado en Montevideo*, ed. by Graciela Barrios and Virginia Orlando, 93-100. Montevideo: Gráficos del Sur.
- Naro, Anthony. 1981. The social and structural dimensions of a syntactic change. *Language* 57.63-98.
- Naro, Anthony, and Marta Scherre. 1993. Sobre as origens do português popular do Brasil. *DELTA* 9.437-85.
- Poplack, Shana. 1980. Deletion and disambiguation in Puerto Rican Spanish. *Language* 52.371-85.
- Poplack, Shana. 1981. The notion of the plural in Puerto Rican Spanish: competing constraints on (s) deletion. *Locating language in time and space*, ed. by William Labov, 55-67. New York: Academic Press.
- Ranson, Diana L. 1993. The interaction of linguistic and contextual number markers in Andalusian Spanish. *Hispania* 76.919-30.
- Scherre, M. Marta P. 1988. *Reanálise da concordância nominal em português*. Rio de Janeiro: Universidade Federal dissertation.

- Scherre, M. Marta P. 1989. Sobre a saliência fônica na concordância nominal em português. *Fotografias sociolingüísticas*, ed. by Fernando Tarallo, 301-32. São Paulo: Pontes.
- Scherre, M. Marta P. 1994. Aspectos da concordância de número no português do Brasil. *Revista Internacional da Língua Portuguesa* 12:37-49.
- Scherre, M. Marta P. 2001a. Major linguistic patterns in noun phrase agreement in Brazilian Portuguese. *Cinquanta'anni di ricerche linguistiche: problemi, risultati e prospettive per il terzo millennio. Atti del IX Convegno Internazionale di Linguisti*, ed. by Roda Bianca Finazzi and Paola Tornaghi, 461-73. Alessandria: Edizioni dell'Orso.
- Scherre, M. Marta P. 2001b. Phrase-level parallelism effect on noun phrase number agreement. *Language Variation and Change* 13.91-107.
- Scherre, M. Marta P., and Anthony Naro. 1992. The serial effect on internal and external variables. *Language Variation and Change* 4.1-13.
- Scherre, M. Marta P., and Anthony Naro. 1998. Sobre a concordância de número no português falado do Brasil. *Dialettologia, geolinguística, sociolingüística: atti del XXI Congresso Internazionale di Linguistica e Filologia Romanza*, vol. 5, ed. by Giovanni Ruffino, 509-23. Tübingen: Max Niemeyer Verlag.
- Terrell, Tracy. 1975. Functional constraints on deletion of word final /s/ in Cuban Spanish. *Proceedings of the First Annual Meeting of the Linguistic Society of Berkeley*, ed. by Cathy Cogen, 431-7. Berkeley: University of California Press.
- Terrell, Tracy 1986. La desaparición de /s/ posnuclear a nivel léxico en el habla dominicana. *Estudios sobre la fonología del español del Caribe*, ed. by Rafael A. Nuñez Cedeño, Iracete Páez Urdaneta, and Jorge Guitart, 117-34. Caracas: Bello.
- Thomason, Sarah, and Terrence Kaufmann. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: University of California Press.

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