

Diachronic Changes in the Position of Frequency Adverbials: Linguistic Variation in Peninsular and Latin American Spanish

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Goals

- Extending a previous variationist analysis by Mayoral Hernández (2004 and in press), we will show that the syntactic distribution of adverbials is sensitive to speaker preferences (Lohse et al. 2004, Wasow & Arnold 2003).
- Speakers are influenced by sociolinguistic and stylistic factors, and diachronic change that partially determine the position of adverbials in Spanish:
 - Gender (Silva-Corvalán 2001, Lavandera 1975)
 - Language variety (Silva-Corvalán 1997, Ranson 1991, Morales 1986)
 - Century (Aranovich 2003, Castillo 2002, Fontana 1993, Rivero 1991)

Adverbial Alternation

Frequency adverbials can appear in different positions in the sentence without altering the meaning (examples from CREA):

1. Before (a) and after (b) a co-occurring XP in preverbal position

a. **Frecuentemente** los miembros de las comunidades reciben cursos de protección ambiental.

‘Frequently the members of the communities receive courses on environmental protection.’

b. Los agentes del SIN **frecuentemente** realizan redadas en empresas...

‘The SIN agents frequently carry out raids on companies...’

2. Before (a) and after (b) a co-occurring XP in postverbal position :

a. la actividad del citado empresario trasciende **frecuentemente** el mero aspecto comercial

‘the activity of the aforementioned businessman frequently transcends the merely commercial aspect’

b. La situación ha sido muy tensa **frecuentemente**

‘The situation has frequently been very tense’

Current Analysis

- Previous research has shown that *weight*, *presence of overt subjects* and *verb type* are relevant predictors for the position of frequency adverbials (Mayoral Hernández 2004, in press):
- Our research expands previous work (Mayoral Hernández 2004, in press) by testing whether sociolinguistic and stylistic factors also affect the position of frequency adverbials:
 - Gender: do women and men show the same syntactic distribution?
 - Language variety: are there dialectal differences between Latin American and Peninsular Spanish?
 - Century: has the position of adverbs changed over time?

Hypotheses

1. Gender

- Gender has been studied as a source of sociolinguistic variation for a variety of grammatical phenomena. For Spanish, see Silva-Corvalán (2001) and references therein.
- For instance, Lavandera (1975) analyzes the use of imperfect indicative and simple conditional in the main clause of conditional sentences in Buenos Aires. The following table shows that women and men have different preferences for tense in the apodosis.

Hypotheses

Conditional vs. imperfect in apodosis by gender

	N Total	-ría		-ba	
Total speakers	33	19	55%	14	45%
Women	19	8	35%	11	65%
Men	14	11	79%	3	21%

Lavandera 1975 cf. Silva-Corvalán 1989

- Our first hypothesis predicts that gender influences the position of adverbials. Accordingly, women and men will show a different syntactic distribution.
- Gender is a dichotomous variable with these values:
 - Male
 - Female

Hypotheses

2. Language Variety

- Dialectology studies have shown salient differences in the phonology and syntax of Peninsular and Latin American Spanish (Silva-Corvalán 1997, Morales 1986, Ranson 1991, Lizardi 1993, Ordóñez & Olarrea 2006).

Subject expression across countries

	Los Angeles	Puerto Rico	Andalucia
Yo	42%	47%	50%
Él/Ella	31%	37%	10%
Nosotros/as	18%	19%	19%
Ellos/as	18%	18%	9%

Silva-Corvalán 1997, Morales 1986 and Ranson 1991 respectively

Hypotheses

- The previous table shows that there are obvious differences between countries as far as subject expression is concerned:
 - Peninsular Spanish (Andalucía) shows a higher tendency to omit subjects in third person than American varieties (Los Angeles and Puerto Rico).
- Due to existing differences between Peninsular and Latin American Spanish, this hypothesis predicts that adverbial position will also be influenced by this factor.
- In our corpus, *language variety* is a dichotomous variable with these two values:
 - Peninsular: Spain
 - Latin American: Latin American countries and US Spanish

Hypotheses

3. Century

- There is obvious diachronic variation between different historical periods that has already been studied (Rivero 1997, Aranovich 2003, Castillo 2002, Fontana 1993).
- For example, in Old Spanish clitic pronouns could appear in any position, but not sentence initially.

Si lo el rey por bien toviere, mándeme quemar. (Rivero 1997)

if it the king for good had, order.me burn

‘If the king considered it good, let him order that they burn me.’

- This hypothesis predicts diachronic changes in adverb placement.
- In our corpus, *century* is a dichotomous variable with these two values:
 - Old Spanish (OSp, CORDE: 1500 -1800)
 - Modern Spanish (MSp, CREA)

Corpus and Annotation

- We used the corpus in Mayoral Hernández (2004, in press), which consists of 1033 sentences from the online Corpus de Referencia del Español Actual (CREA).
- We added an additional 564 sentences to balance the male-female ratio, increasing the corpus to a total of 1597 sentences.
- For the diachronic analysis, we extracted 412 tokens from Corpus Diacrónico del Español (CORDE).
- We converted this annotated corpus into a database.
- Several Python scripts were written to mine the database and automatically extract information regarding gender, language variety and genre. This information was processed, correlated and coded automatically into a format readable by SPSS by the aforementioned scripts.

Results: Contemporary Spanish

1. Gender

- The table below shows that gender is statistically significant ($p = 0.000$). We took the standard $p < 0.05$ as the threshold for significance.
- Women favor postverbal adverbials. Note that only books contain author information ($n = 657$).

Position of adverbials * Gender Crosstabulation

			Gender		Total
			Female	Male	
Position of adverbials	Postverbal position	Count	195	156	351
		% within Gender	62.5%	45.2%	53.4%
	Preverbal position	Count	117	189	306
		% within Gender	37.5%	54.8%	46.6%
Total	Count	312	345	657	
	% within Gender	100.0%	100.0%	100.0%	

Results: Contemporary Spanish

2. Language Variety

- This variable proved to be a statistically significant factor ($p = 0.000$).
- The Peninsular variant favors postverbal adverbials.

Crosstab

			Language Variety		Total
			Spain	Latin America	
Position of adverbials	Postverbal position	Count	542	354	896
		% within Language Variety	60.4%	50.6%	56.1%
	Preverbal position	Count	355	346	701
		% within Language Variety	39.6%	49.4%	43.9%
Total		Count	897	700	1597
		% within Language Variety	100.0%	100.0%	100.0%

Results: Diachronic Analysis

3. Century

- There is no statistically significant difference in adverb placement between MSp and OSp ($p = 0.801$).
- This variable is only significant ($p = 0.000$) when OSp is compared to MSp in *Latin American* texts written by *male* writers.

Position of adverbials * Century Crosstabulation

			Century		Total
			Old Spanish	Modern Spanish	
Position of adverbials	Postverbal position	Count	234	50	284
		% within Century	56.8%	34.0%	50.8%
	Preverbal position	Count	178	97	275
		% within Century	43.2%	66.0%	49.2%
Total	Count	412	147	559	
	% within Century	100.0%	100.0%	100.0%	

Results: Diachronic Analysis

- There is no significant difference when comparing all texts in OSp vs *all cases* of MSp in *Spain* ($p = 0.215$).
- No statistically significant difference observed between OSp and MSp in texts written in *Spain* by *male* writers (as seen below, $p = 0.448$).

Position of adverbials * Century Crosstabulation

			Century		Total
			Old Spanish	Modern Spanish	
Position of adverbials	Postverbal position	Count	234	106	340
		% within Century	56.8%	53.5%	55.7%
	Preverbal position	Count	178	92	270
		% within Century	43.2%	46.5%	44.3%
Total	Count	412	198	610	
	% within Century	100.0%	100.0%	100.0%	

Results: Contemporary Spanish

4. Gender by Language Variety

- This table shows gender information for Peninsular Spanish.
- Although there is a tendency for women to prefer postverbal positions more than men, gender in Spain is not statistically significant ($p= 0.088$).

Position of adverbials * Gender Crosstabulation

			Gender		Total
			Female	Male	
Position of adverbials	Postverbal position	Count	91	106	197
		% within Gender	62.8%	53.5%	57.4%
	Preverbal position	Count	54	92	146
		% within Gender	37.2%	46.5%	42.6%
Total	Count	145	198	343	
	% within Gender	100.0%	100.0%	100.0%	

Results: Contemporary Spanish

- This table shows gender information for Latin American varieties (n = 314).
- Gender in Latin America is significant (p= 0.000).
- Thus, the overall significance obtained in the general gender table (slide 11) results from the high percentage of preverbal positions used by Latin American men.

Position of adverbials * Gender Crosstabulation

			Gender		Total
			Female	Male	
Position of adverbials	Postverbal position	Count	104	50	154
		% within Gender	62.3%	34.0%	49.0%
	Preverbal position	Count	63	97	160
		% within Gender	37.7%	66.0%	51.0%
Total	Count		167	147	314
	% within Gender		100.0%	100.0%	100.0%

Results: Overview

1. Gender

- The analysis initially showed that gender is statistically significant overall ($p = 0.000$).
- Once we controlled the results by Language Variety, we observed:
 - gender in Spain is not significant ($p = 0.088$)
 - gender in Latin America is significant ($p = 0.000$)
- Therefore, the Latin American data caused the overall significance of gender.
 - In particular, women seem to behave uniformly across countries, preferring postverbal positions.
 - Spanish men pattern together with women, since they all prefer postverbal positions. In contrast, Latin American men favor preverbal positions.

Results: Overview

2. Language Variety

- The previous results initially showed that *language variety* is statistically significant overall ($p = 0.000$).
- However, this factor depends on gender. If we take out Latin American men, this variable is not significant ($p = 0.297$).

Position of adverbials * Country Crosstabulation

			Country		Total
			Spain	Latin America	
Position of adverbials	Postverbal position	Count	197	104	301
		% within Country	57.4%	62.3%	59.0%
	Preverbal position	Count	146	63	209
		% within Country	42.6%	37.7%	41.0%
Total	Count	343	167	510	
	% within Country	100.0%	100.0%	100.0%	

Results: Overview

3. Century

- The diachronic analysis shows no significant difference between Old Spanish and Modern Spanish, as far as adverb position is concerned ($p = 0.801$).
- After controlling language variety and gender, we only found a statistically significant difference between OSp and MSp texts written by Latin American men ($p = 0.000$).
- This trend might be pointing towards a possible evolution of Spanish, if one considers the tendency for men to innovate (Silva Corvalán 2001) and for women to be more conservative in formal styles (Labov 1966). This is evident in Latin America and a tendency in Spain.
- Spanish might be evolving towards a system more similar to modern French.

Conclusion

- The current analysis proves that the variable position of frequency adverbials is not only a structural phenomenon (Mayoral Hernández 2004, in press).
- The syntactic distribution of adverbials is influenced by sociolinguistic and stylistic factors (Aranovich 2003, Castillo 2002).
- Our diachronic study shows that the synchronic variation in gender for Latin American varieties is an innovation, which is also observed as a tendency in Spanish males (Silva-Corvalán 2001).
- Our diachronic study might point towards a possible evolution of adverbials to preverbal positions.
- The use of computational tools for text processing dramatically reduces coding time by extracting and coding relevant information automatically.