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# Learning L2 Rhythm: Does the direction of acquisition matter?



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## Research Question

Does the **direction of learning** affect the acquisition of **final and accentual lengthening** by Dutch learners of Spanish (DLS) and Spanish learners of Dutch (SLD)?

Spanish	Dutch
"syllable-timed"	"stress-timed"
simple syllables (CV)	complex syllables (up to 6 Cs in 1 syllable)
< final lengthening	> final lengthening
< accentual lengthening	> accentual lengthening

La	ma	dre	de	Su	sa	na	es	de	Má	la	ga
De	ma	ma	van	Su	sa	na	komt	uit	Má	la	ga

## Background

### Markedness Differential Hypothesis

(Eckman, 1977, 2008)

"the areas of the target language that differ from the L1 and are more marked than the L1 will be difficult for L2 learners."

### Markedness

(Eckman, 1977 : 320-321)

"A phenomenon is more typologically marked if the presence of this phenomenon in a language implies the presence of another phenomenon; but the presence of the latter does not imply the presence of the former."

## Rhythm & Markedness

Stress-timed is more marked than syllable-timed (e.g., Ordín & Polyanskaya, 2015; Payne, Post, Prieto, Vanrell & L. Astruc, 2012)

Lengthening effects of any kind imply that there is a lower baseline.

Dutch is more marked than Spanish, due to its complex syllable structure and lengthening effects.

## Hypothesis

*Rhythmic features of Dutch are more difficult to acquire for Spanish learners than the rhythmic feature of Spanish are for Dutch learners.*

Focus on: **accentual** and **final lengthening**

## Method

### Participants

5 participants per language group:  
L1 Dutch, DLS with varying proficiency: A1, A2, B1, B2, C1, C2  
L1 Spanish, SLD with varying proficiency: A1, A2, B1, B2, C1

### Materials

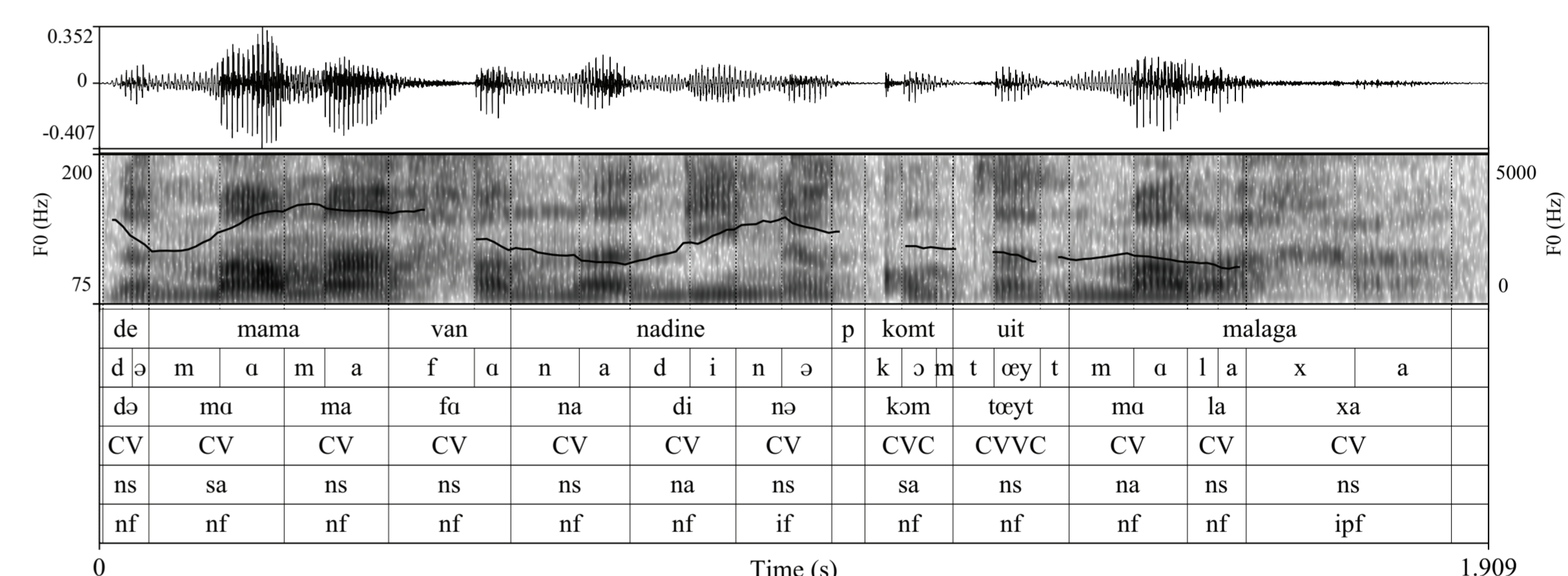
15 sentences with comparable type and number of syllables and prosodic phrases for both languages.

(Prieto, Vanrell, Astruc, Payne & Post, 2012; Nazzi, Bertoncini & Mehler, 1998)

### Procedure

participants were asked to read the sentences aloud, repeating those that were not fluent.

## Prosodic coding (Prieto et al., 2012)



## Statistical analysis

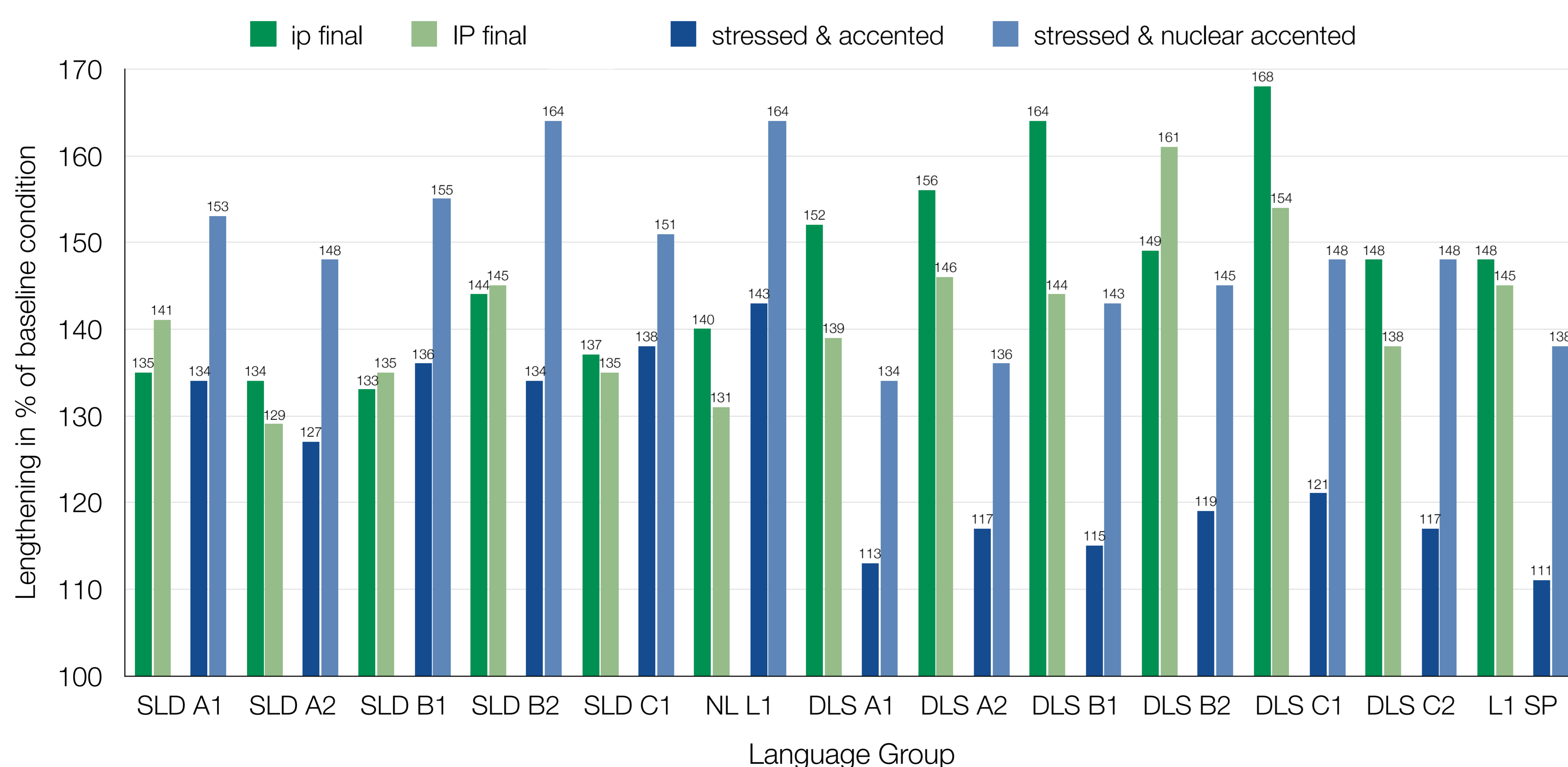
Generalized Linear Mixed Effects model

*Fixed factors:* speaker group, lengthening level (either accentual or final)

*Random factor:* speaker

*Target variable:* syllable duration, in percentage of baseline condition (Li & Post, 2014)

## Results



## Conclusion

H: *Rhythmic features of Dutch are more difficult to acquire for Spanish learners than Spanish is for Dutch learners.*

Both groups approach native values quite well.

Statistically, there are no differences were found that can determine whether DLS or SLD advance more towards their target.

The **hypothesis cannot be rejected** based on the results.

## Discussion

- effect of syllable structure (CV, CVC, or mixed)
- rhythm metrics
- include item as a random factor