Consonant Features of Chilean Spanish: A Case of Lenition and Underspecification

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Introduction

- Spanish has no geminates or long vowels, yet the understudied Chilean dialect appears to derive geminates via compensatory lengthening (CL).
- Coda /r/ lengthens following sonorant onsets (1a).
- Word-final /s/ lengthens any following word-initial onset (1b).

(1) a. /pjerna/ → [pjénna] 'leg'
b. /menos+feo/ → [ménofféo] 'less ugly'

- Chilean never repairs poor coda-onset clusters via full deletion, only via manner assimilation and lenition of the coda.
- In Moraic Theory (Hayes, 1989), coda deletion can lead to vowel lengthening or gemination depending on spreading direction, but when a vowel is to the right of a target /s/, CL is blocked (2).

(2) /los+arboles/ → [lo.árvoleh], *[lo.á:rvoleh] 'the trees'

- Chilean repairs hiatus via glide formation (3a), but when /s/ deletes before a vowel-initial word (3b) or voiced stops delete intervocalically (3c), vowels are left in hiatus.

(3) a. /la+imaxen/ → [lajmáxen] 'the image'
b. /las+imaxenes/ → [la.imáxeneh], *[lajmáxeneh] 'the images'
c. /morado/ → [morá.o], *[moráw] 'purple'

Methods

- 14 Chilean adults (aged 30-80) from the Santiago Metropolitan area (8 women, 6 men).
- Mostly monolinguals whose caregivers were also speakers of Santiago Spanish.
- The target patterns are socially stigmatized (in particular, the /r/-derived gemination), so the data had to be collected from colloquial speech.

Trial 1: free conversation in pairs (30 mins)
- Elicited spontaneous, relaxed speech.

Trial 2: sentence repetition (4 sentences per participant)
- Elicited rarer tokens in exhaustive contexts, in careful speech.

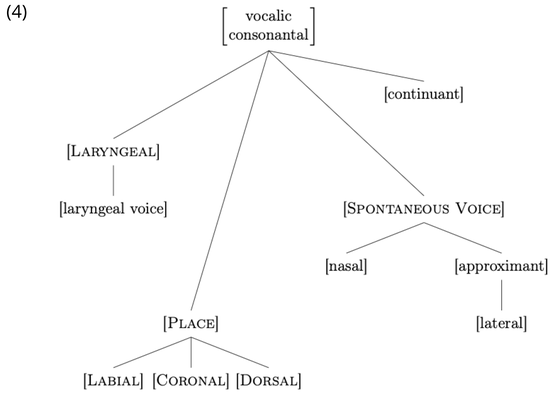
Trial 3: image-guided storytelling (1 min story)
- Elicited rarer tokens in relaxed speech

- Using Praat for finer inspection, deletion and lengthening occurrences were collected on a spreadsheet along with the following variables:
  - Target segment
  - Phonological context
  - Morphological context
  - Stress
  - Speech register
  - Participant who produced it

Analysis

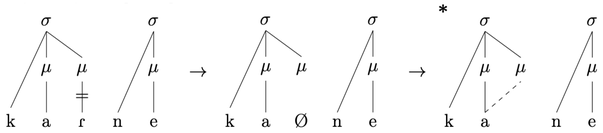
Theoretical Background
- Feature Geometry as in (4) (Clements, 1985).
- Features are monovalent.
- Major class features [cons] for contoids and [voc] for vocoids are in the root node.
- Voiced stops and sonorants have an [SV] (Spontaneous Voice) node to account for sonorant-sonorant assimilation processes (Rice & Avery, 1989; Piggott, 1992).
- Rhotics are placeless and are identified by a lack of manner features (Wiese, 2011).

(4)



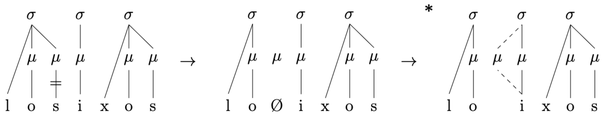
The Problem with Deletion and Gemination
- Maybe a deletion rule deletes coda /r/ before sonorant consonants.

(4) /karne/ → *[ka:ne] 'meat'



- Once a mora is stranded, it can receive material from a neighbouring melody, but vowels are cross-linguistically the default result of CL (Kavitskaya, 2014).
- In coastal varieties of LatAm Spanish, /s/ lenites either to [h] in coda or to Ø mostly word-finally (Hualde, 2005), but CL is not triggered when the following word is vowel-initial; only consonants lengthen.

(5) /los+ixos/ → *[lo.i:xoh] 'the sons'



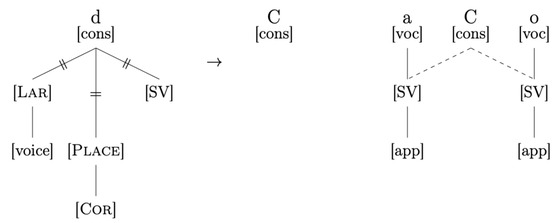
- Full deletion and gemination cannot account for the data, so we need a more constrained representation.

Representing Lenition
- Intervocalic voiced stops can lenite either by spirantizing with optional approximantization (6a) or by deleting (6b) and leaving surrounding vowels in hiatus.

(6) a. /lado/ → [láðo]~[láðo] 'side'
b. /lado/ → [lá.o] 'side'

- The stop partially deletes (7a), retaining its stable [cons] root (7b).

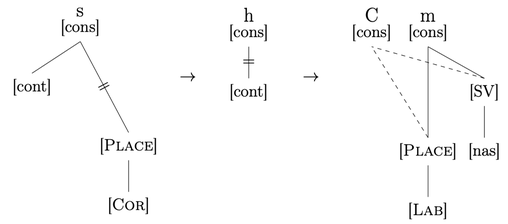
(7) a. b. *c.



- The impoverished melody C is only specified with [cons] and cannot have its features restored from adjacent vowels.
- Feature-filling is only allowed when the target is a subset of the features c-commanded by the providing node (7c).
- Because C is not a subset of vocoids, it is outputted with no phonetic content, and the surrounding vowels are intercepted from coming into hiatus.

Feature-filling Repairs
- Similarly, word-final /s/ lenites to [h] by delinking its place features (debuccalization), and partially deletes to [C] by delinking [cont].

(8) /las+muxeres/ → lahmuxereh → [lammuxéreh] 'the women'

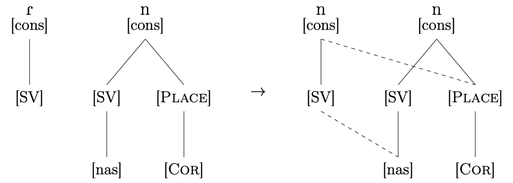


- In Chilean, manner features can spread independently of other supralaryngeal features (9).

(9) a. /ignoransja/ → [iŋnoránsja] 'ignorance'

- Feature-filling is only allowed when the target node is a subset of everything that the providing node c-commands.
- If /r/ has a bare [SV] and no [Place], it is a natural target for spreading from other sonorants.

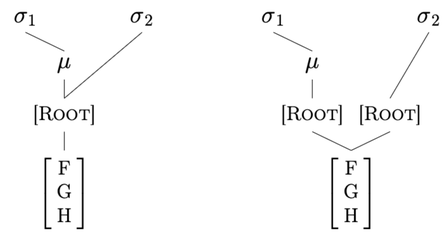
(10) /pjerna/ → [pjénna] 'leg'



Conclusion

- When two feature matrices share all features below the root, both of their individual representations are identical: a pseudo-geminate.

(11) a. Geminate b. Pseudo-Geminate



- Partial deletion leads to a near-empty position that assimilates to an adjacent melody unless feature-filling is blocked.
- Full deletion leads to an empty position that totally assimilates to a neighbouring melody (a vowel by default).

Summary of representations:

Deletion type	Remaining representation	Feature-filling (CL) type	Outcome
Total	[Ø] (stranded μ)	Spread [voc] (root node assimilation)	Long vowel
Partial	[C] (bare [cons] root)	Spread dependents of [cons]	Pseudo-geminate

- If total assimilation (spreading all features) is considered lengthening, why is partial assimilation (spreading one feature) not also conceived of as lengthening?
- Since every CL case is total or partial assimilation, CL can thus be conceived of as a feature-filling repair.
- Perhaps CL is not special; it is just another phonotactic repair.

References

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