

### Testing the representational status of Sevillian Stop-H sequences with stress

**Introduction:** While many varieties of Spanish aspirate coda /s/ to [h] (/tʃispa/ → [tʃihpa]), an ongoing change in Sevillian Spanish variably turns *h-stop* into *stop-h* sequences ([tʃihpa]→[tʃiphpa]) (Ruch & Peters 2016; Torreira 2006). Some argue that [Ch] sequences are becoming phonemic (Gylfadottir 2015; O’Neill 2009), but other work treats them as metathesized underlying /sC/ clusters (Torreira 2012; Parrell 2012). I probe the representation of [Ch] sequences with a stress judgment task. Results provide evidence for the cluster representation, and support a serial analysis in which stress is assigned before segmental reduction and metathesis.

**Experiment:** In Spanish, antepenultimate stress is rare when the penult is heavy (\*CV́.CVC.CV) (Harris 1983; Fuchs 2018). My nonce word perception experiment uses this restriction to test the representational status of [Ch]. Do listeners treat syllables preceding [Ch] as heavy or light? If [Ch] is underlyingly a cluster (/sC/), the preceding syllable is heavy (/’CV.CVS.CV/) and listeners should disprefer antepenultimate stress. If [Ch] is an aspirated stop (/C<sup>h</sup>/), the preceding syllable is light (/’CV.CV.C<sup>h</sup>V/) and antepenultimate stress should be more acceptable.

In the experiment, 26 Sevillian listeners heard pairs of nonce words and chose the one they preferred. The nonce words have antepenultimate stress and the final onset is /ptk/. Within each set, words differ only in type of coda in the penult (Table 1).

Table 1 Nonce word example set

|          | a. NoCoda | b. Coda    | c. CodaS   | d. CodaH   | e. Stop-H  |
|----------|-----------|------------|------------|------------|------------|
| /p/, /a/ | gi'nakapo | qi'nakampo | qi'nakaspō | qi'nakahpo | qi'nakapho |

In comparison to words with light penults, do listeners disprefer words with Stop-H penults as much as words with other surface-heavy penults? (NoCoda comparisons; a-b, a-c, a-d, a-e) In comparison to words with Stop-H penults, do listeners prefer one type of penult over another, and do they disprefer light penults (Stop-H comparisons; e-a, e-b, e-c, e-d)? Each participant heard 108 trials (test items, fillers, controls). Results were analyzed in logistic mixed-effects regressions.

**Results:** In the NoCoda comparisons, listeners preferred the NoCoda form over all forms with a coda in the penult (Figure 1, left), and preferred it at approximately the same rate over all of them. This suggests that [Ch] is representationally similar to forms with a surface-heavy penult. The Stop-H comparisons (Figure 1, right) confirm this result. Listeners treat [’CV.CV.C<sup>h</sup>V] words as having a heavy penult (LLHL), just like coda [s, h, n], supporting the cluster analysis.

**Analysis:** A serial analysis treating [Ch] sequences as /sC/ clusters captures the opaque interaction between stress and metathesis. Stress is assigned on the UR, when the penult

|             |                    |       |              |
|-------------|--------------------|-------|--------------|
| UR:         | /ka.pi.ta.lis.ta/  | LLLHL | ‘capitalist’ |
| Stress:     | [ka.pi.ta.'lis.ta] | LLLHL | (*[LLLHL])   |
| Debucc:     | [ka.pi.ta.'lih.ta] | LLLHL |              |
| Metathesis: | [ka.pi.ta.'li.tha] | LLLLL |              |

is heavy and prevents antepenultimate stress. Only after stress is assigned does /s/ debuccalize to [h] and metathesize, creating a surface-light penult.

**Discussion:** Sevillian Spanish metathesis is an interesting addition to work on interactions between metrical and segmental structure, since metathesis changes syllable structure and could potentially affect stress. While much work addresses other segmental-stress interactions (e.g. stress-epenthesis, Elfner 2009), prior work on stress and metathesis is limited. One main finding is that stress can cause metathesis (e.g. Kwara’ae, Austronesian; Heinz 2005), which is not what happens in Sevillian Spanish. The interaction between stress and metathesis in Sevillian Spanish raises further questions about how stress and metathesis interact typologically, and if other interactions of this type—where metathesis clearly occurs before stress—occur.

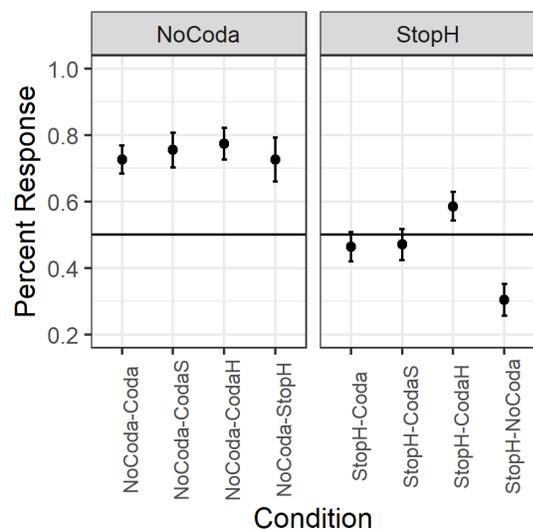


Figure 1 Proportion response of base form (vs. comparison form)

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