Loanword Adaptation of Spanish /θ/ Across Basque Dialects

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1 Overview

Basque

- Basque is an isolate with a high degree of dialectal diversity [1]
- Extensive contact between Spanish and Basque: many loanwords
- **Typologically marked three-way sibilant series:** /(t)ʃ, (t)s̻, (t)s̺/ [2]
  - **Example:** *xaia* (bodega) ~ *zaia* (skirt) ~ *saia* (vulture)

Spanish -> Basque

- Peninsular Spanish is known for its interdental fricative /θ/: **missing in Basque**
- Laminal [s̻] is the dominant adaptation of /θ/ in loanwords [3]
- However, the Western dialect has a merger: laminal /s̻/ surfaces apically as [s̺] [4]
  - **Example:** *zu* (you) and *su* (fire) are both realized apically: [s̺u]

Corpus

- Extracted from the Euskararen Herri Hizkeren Atlasa (EHHA) [5]
  - Over 2000 lemmas that are phonetically transcribed for 145 villages
- Tokens constitute individual lemma realizations extracted from the atlas
  - Preserved lemmas whose Spanish translation containing /θ/ is **phonemically very similar** to its Basque translation
  - Over 5000 observations of 62 lemmas

2 Phonotactics

- Phonotactics condition how /θ/ surfaces:
  - When not following a sonorant: relatively low probability of affrication ($\hat{\beta}$ = −5.09, 95% CI [−5.41, −4.80], p <.001)
  - **Post-sonorant contexts significantly increase affrication**
- This effect is not uniform:
  - Liquids condition affrication more than /n/ ($\hat{\beta}$ = 1.01, 95% CI [0.72, 1.31], p < .001)

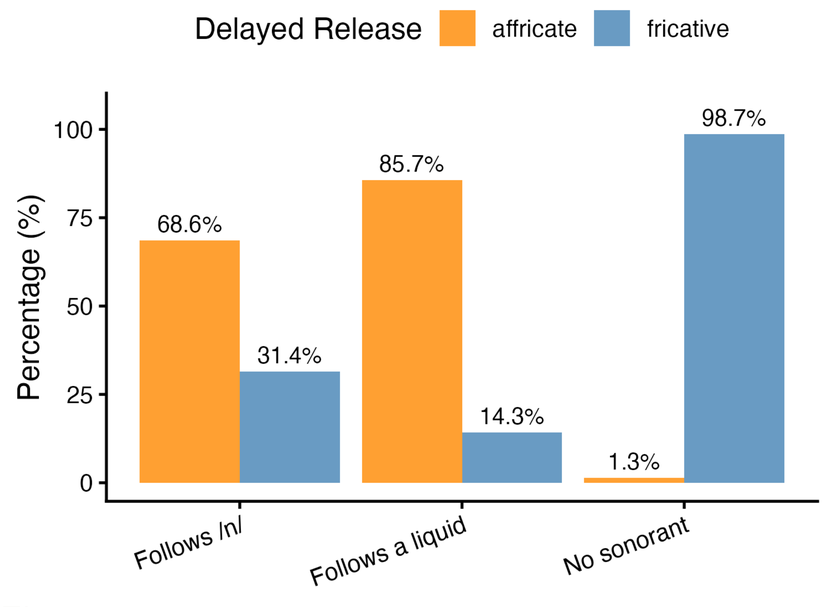

Fig. 1:

- After /n/: $\hat{\beta}$ = 0.78, 95% CI [0.63, 0.93], p < .001
- After liquids: $\hat{\beta}$ = 1.01, 95% CI [0.72, 1.31], p < .001
- After non-sonorant contexts: $\hat{\beta}$ = −5.09, 95% CI [−5.41, −4.80], p < .001

3 Dialectal variation

- Laminal adaptation is not categorical: shaped by the **sibilant merger** (Fig.2)
- Apical adaptation aligns strongly (≈96%) with Zuazo's Western dialect [6] (Fig.3)

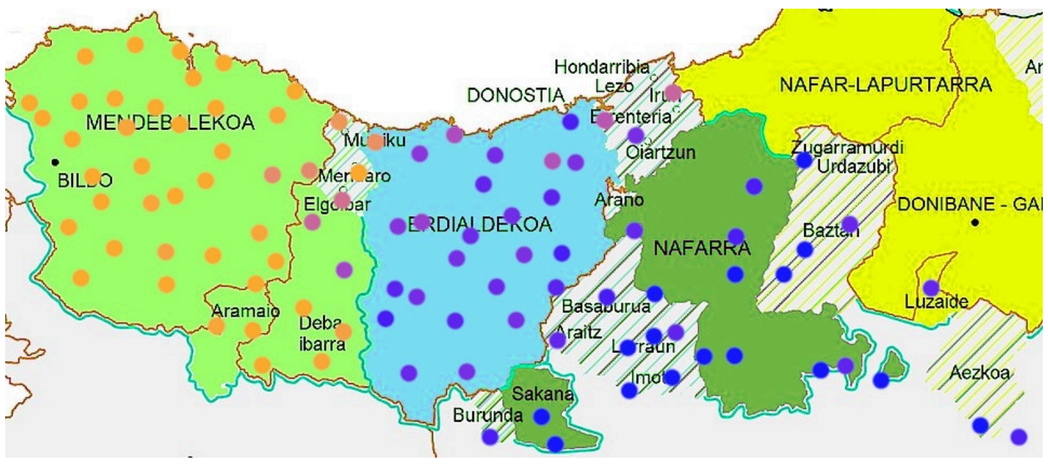

Fig.2: Scaled to an orange-blue color gradient, the realizations of each village of the Southern Basque Country included in the corpus are overlaid onto Zuazo's dialect classification [6], where blue dots represent laminal realization and orange dots represent apical realization.

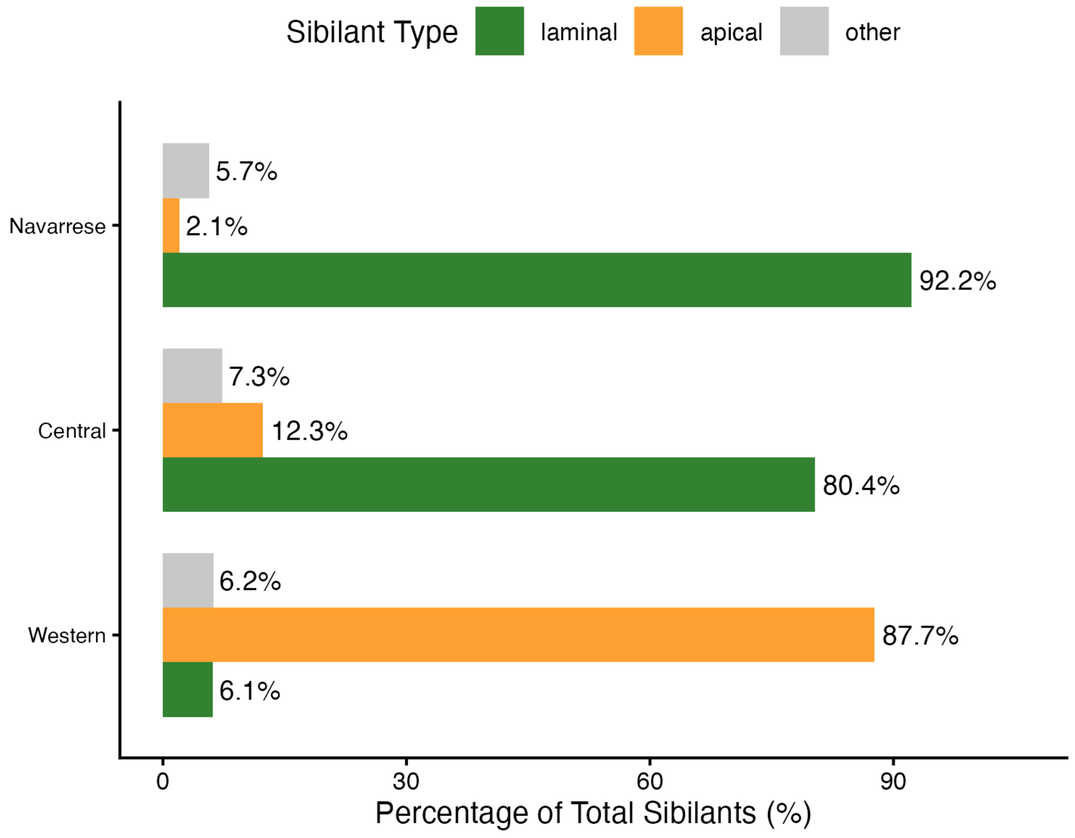

Fig. 3: Western Basque shows dominant apical adaptation, compared to other dialects of the Southern Basque Country.

4 Conclusion

- Loanword adaptation can serve as a probe into dialectal variation
  - Specifically, the Western sibilant merger
- The adaptation of /θ/ is conditioned by:
  - Phonotactics
  - Dialectal variation
- **Future work:** Exploring more recent data to see if the merger is stable

References

[1] K. Zuazo, Standard Basque and Its Dialects. London: Routledge, 2019. doi: 10.4324/9780429429729. [2] J. I. Hualde, Basque Phonology. London: Routledge, 2004. doi: 10.4324/9780203168004. [3] M. Jurado Noriega, "Caracterización de sibilantes fricativas vascas y su percepción en el sistema fonético español," Anuario del Seminario de Filología Vasca Julio de Urquijo: International journal of basque linguistics and philology, vol. 45, no. 1, pp. 81–137, 2011. [4] R. L. Trask, "Phonology," in The History of Basque, Routledge, 1997. [5] Euskaltzaindia, Euskararen Herri Hizkeren Atlasa. Bilbo: Euskaltzaindia / Real Academia de la Lengua Vasca, 2008. [6] K. Zuazo and N. Grande,"Euskalkiak." 2019.