Language-internal evidence for resisting contact-induced change in Gascon and Languedocien

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Indiana University – Bloomington
47th Penn Linguistics Conference – Philadelphia, PA
March 18th-19th, 2023
Perception and (historical) sound change

- Sound change can arise via the re-interpretation of secondary phonetic cues as being part of the primary signal (Ohala, 1989; 2003)
  - E.g. Nasal assimilation *souvent* ‘often’ (exercise in F603 with Barbara Vance, Fall 2022)
- Some sound changes have yet to be explained via knowledge of synchronic phonetic data
  - The loss of the palatal lateral has been documented in the history of French (Ayres-Bennett, 1996; Lodge, 2004), but phonetic explanations have not been proposed
- **Aim:** Explore possible explanations for loss of /ʎ/, specifically in Occitan
  - Current change in progress
  - Data from Catalan and Spanish have shown loss of /ʎ/ with inconclusive results (Colantoni, 2004; Mooney & Hawkey, 2019)
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History and development

- **French** and Occitan followed the same patterns of sound change until around the Gallo-Romance period (ca. 5th century A.D.; Lodge, 1993)

- Occitan’s phonemic inventory retains phonemes that were eventually lost in French (e.g. /ʎ/ and /β/)

- **Takeaway:** Information about the phonological development of French and evidence of changes in progress for phonemes retained in modern Occitan can inform each other
Gascon vs. Languedocien

- **Gascon** (Mooney & Hawkey, 2019)
  - Appears to be sensitive to contact induced change from French

- **Languedocien** (Bec, 1973)
  - More conservative in retaining Occitan phonological features than other dialects

*Given that both dialects have been in intense long-term contact with French (see Lodge, 1993) and are low in prestige (Valdman, 1983)...*

**What may account for Languedocien’s apparent resistance to change when, like Gascon, it is in intense contact with French?**
/ʎ/ in Gascon and Languedocien

- /ʎ/ is retained in modern Occitan (Müller, 2011) in positions where it was lost during the development of modern French (Lodge, 2004)
- Gascon (Mooney & Hawkey, 2019)
  - /ʎ/ often realized with an accompanying glide-like segment: [ʎj]
  - /ʎ/ sometimes realized word-medially and word-finally as [j], like in French
- Languedocien (Bec, 1973; Oliviéri and Sauzet, 2016)
  - /ʎ/ depalatalizes to [l] word finally

Does word position influence whether a palatal lateral segment is produced?
Research question #1

Does /ʎ/ seem to be associated more with the glide-like element or the lateral element depending on the dialect?

(a) Gascon speakers will associate /ʎ/ with neither the glide-like element, nor the lateral element

Tokens of [ʎ̄] do not have longer [j] segments in Gascon (Mooney & Hawkey, 2019)

(b) Languedocien speakers will associate it more with the lateral element

/ʎ/ depalatalizes to [l] word finally in Languedocien, and it is generally more conservative than other Occitan dialects in retaining phonological features (Bec, 1973)
Research question #2

Are some word positions more likely to retain palatal lateral segments, [ʎ][ʎj], depending on the dialect?

(a) More likely to remain word-initially in Gascon
[j] is attested word-medially and word-finally in Gascon (Mooney & Hawkey, 2019)

(b) Likely to remain word-initially and word-medially in Languedocien
/[ʎ]/ depalatalizes to [l] word finally in Languedocien (Bec, 1973; Oliviéri and Sauzet, 2016)
OcOr: a Corpus of Occitan Oral Narratives

- Three types of narratives:
  - Written and traditional
  - Oral and traditional
  - Oral and contemporary

- Target: Oral and contemporary
  - 12 recordings of storytellers at a festival in Toulouse
    - Anywhere from ~6 to ~19 minutes in length
    - Average length of ~11 minutes
    - About 2 hours and 16 minutes in total
  - 4 speakers
    - 2 Gascon speakers (1 man, 1 woman)
    - 2 Languedocien speakers (1 man, 1 woman)
    - All speak both French and Occitan
Methodology - extraction

1. Transcriptions provided in OcOr Corpus
   (Vergez-Couret & Carruthers, 2018)

2. Found all instances of /ʎ/
   Used automated methods

181 tokens
Methodology - coding

Dialect
- Gascon
- Languedocien

Position
- Final
- Medial
- Initial

Variant
- [ʎ]
- [ʎj]
- [j]
- [l]

Duration
- lateral and glide segments in [ʎj]
Methodology - statistical analysis #1

Does /ʎ/ seem to be associated more with a glide-like element or the lateral element depending on the dialect?

Mixed-effects linear regression

**Dependent:** Duration in tokens of [ʎ]

**Factors:** (1) Segment, (2) Dialect, (3) Interaction between Segment and Dialect

**Random intercepts:** Speaker & Word
Methodology - statistical analysis #2

Are some word positions more likely to retain palatal lateral segments, [ʎ][ʎ], depending on the dialect?

Mixed-effects logistic regression

**Dependent:** Presence of palatal lateral segments

**Factors:** (1) Position, (2) Dialect, (3) Interaction between Position and Dialect

**Random intercepts:** Speaker & Word
## Results – overview

<table>
<thead>
<tr>
<th></th>
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Results – segments in $\texttt{[\&j]}$ tokens (RQ #1)

Lateral segments are longer than glide segments in Languedocien ($p=0.0009$)

A separate analysis showed lateral segment durations in Languedocien are not significantly different from those in Gascon.
Results – word position (RQ #2)

Palatal lateral segments are realized more frequently when in word medial positions in Gascon ($p=0.0048$) and Languedocien ($p=0.0495$)
Discussion – RQ #1

Does /ʎ/ seem to be associated more with the glide-like element or the lateral element depending on the dialect?

- **Gascon** does not associate tokens of [ʎj] with the glide-like element or the lateral element
  - No significant difference between the duration of lateral segments and glide-like segments
  - Consistent with the results of (Mooney & Hawkey, 2019)

- **Languedocien** associates tokens of [ʎj] with the lateral element
  - Lateral segments are longer than glide-like segments
  - May reflect that for Languedocien speakers the lateral feature is more closely associated with /ʎ/
/ʎ/ “protected” from change

- Longer durations of /ʎ/ in tokens of [ʎj] may reflect that speakers associate the lateral element as the primary signal
  - Thereby “protecting” it from being associated with any other signal, related to the glide-like element or otherwise

- **Languedocien** is also known to be more conservative in its retention of Occitan phonological features (Bec, 1973)
  - Could be that ideologies exist around the maintenance of this “standard” and that these ideologies prevent such changes from occurring
Discussion – RQ #2

Are some word positions more likely to retain palatal lateral segments, [ʎ][ʎʲ], depending on the dialect?

- Both Gascon and Languedocien retain the palatal lateral word-medially
  - Results show that lateral segments are realized more frequently when in word-medial positions
  - Additionally...
    - Gascon never deleted the lateral segment word-initially, and only 14.5% of word-medial tokens were [j]
    - In Languedocien, 85.7% of word-final tokens did not contain a palatal lateral

- So...
Change seems to occur mostly word-finally

- Already attested that /ʎ/ depalatalizes to [l] word finally in Languedocien (Bec, 1973; Oliviéri and Sauzet, 2016)
- [j] also occurs word-finally in Gascon (Mooney & Hawkey, 2019)
- Given that Mooney & Hawkey (2019) propose /ʎ/ is being lost in Gascon due to contact with French...

How did French lose it in the first place?
Implications for French sound change

- **French** had palatal laterals in intervocalic and word–final positions which all changed to [j] by the beginning of the 19th century (Ayres-Bennett, 1996)
  - Word-initial palatal laterals were never formed (Foley, 1979)

- /ʎ/ realized as [ʎ] & [j] throughout the 17th and 18th centuries (Lodge, 2004)
  - Let’s look at an example of a word in modern French [j] is word-final in a position where there was historically /ʎ/ : œil ‘eye’

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<tr>
<th>CL</th>
<th>SL</th>
<th>GR</th>
<th>PF</th>
<th>OF</th>
<th>MidF</th>
<th>ModF</th>
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<tbody>
<tr>
<td>oculum</td>
<td>œklɔ</td>
<td>uɔyɔ</td>
<td>œjɛl</td>
<td>œj</td>
<td>œj</td>
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</tbody>
</table>

- Development of liaison and enchainment (Rickard, 1989)
  - *Mon œil est bleu* ‘my eye is blue’ → [œj. jɛ] → lenition/deletion of coda
    - Change would then spread to word-medial positions
Conclusion

- Evidence from phonetic changes in progress can inform us about historical sound change (see Ohala, 2003)
  - My data suggest Languedocien speakers may resist contact induced change in that lateral segments are likely the primary signal
  - Additionally, palatal lateral loss seems to be most prominent word finally
    - Offered a possible analysis of how this could have occurred in the history of French

- Limitations and future work
  - Conduct a larger level study with more speakers and more tokens
  - Run a study to determine attitudes towards Languedocien vs Gascon
  - Explore whether this change seems to be above or below the level of conscious for speakers
Mercés!

Thanks to Dr. Barbara Vance for a great semester in her course *History of the French Language* in Fall 2022, and to Dr. Liz Hebbard for encouraging and enabling my research on varieties of modern Occitan (and for being just as excited about palatal laterals as I am during Old Occitan reading group)
References


Appendix

- Six varieties of modern Occitan (all endangered)
  - Focus: Gascon and Languedocien (Languedoc)
  - Limousin, Auvergnat, Provençal, and Vivaro-Alpin
- Around 600,000 fluent speakers while up to 1.6 million are occasional speakers (*Minority Rights Group International*)
- Historical seat of Occitan’s cultural, political, and linguistic influence was at Toulouse (Lodge, 1993)