Glide phonotactics in varieties of Catalan (and Spanish)*

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OUTLINE

1. INTRODUCTION
2. GOALS AND THEORETICAL ASSUMPTIONS
3. MAJORCAN EASTERN CATALAN: A MULTIPLE-WAY ADJUSTING VARIETY
4. CENTRAL EASTERN CATALAN: A NON-ADJUSTING VARIETY (quick overview!)
5. CASTILIAN SPANISH: A ONE-WAY ADJUSTING VARIETY (quick overview!)
6. FINAL REMARKS

1 INTRODUCTION

- The palatal glide /j/ and the labiovelar glide /w/ display a vast array of variation in Catalan & in Castilian Spanish, depending on a) the syllabic position and b) the segmental context in which they occur.
- This variation comprises various processes of strengthening and weakening:

<table>
<thead>
<tr>
<th>Position</th>
<th>Variety</th>
<th>Majorcan Eastern Catalan</th>
<th>Central Eastern Catalan</th>
<th>Castilian Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplex, coda</td>
<td>Preservation</td>
<td>re[j], ca[w]</td>
<td>‘king’, ‘(s)he falls’</td>
<td>Preservation</td>
</tr>
<tr>
<td>Postvocalic simplex onset /j/</td>
<td>Weakening, conditioned deletion</td>
<td>fe[ç]la, fi[Ø]a / fe[Ø]a, fi[Ø]a</td>
<td>‘(s)he was doing’, ‘daughter’</td>
<td>Preservation</td>
</tr>
<tr>
<td>Postvocalic simplex onset /w/</td>
<td>Strengthening</td>
<td>ca[w]en</td>
<td>‘they fall’</td>
<td>Preservation</td>
</tr>
</tbody>
</table>

* This work has been supported by the projects FFI2013-46987-C3-1-P (Spanish Government) and 2014SGR918 (Catalan Government), and it is inscribed within the research group GEVaD (http://www.ub.edu/GEVAD/).
2 Goals and theoretical assumptions

2.1 Goals

- To outline a typological comparison of the glide phonotactic patterns attested across some Catalan and Spanish varieties. (Main focus = Majorcan Eastern Catalan)
- To suggest a formal account of these patterns, framed within Optimality Theory, and more specifically within the Split Margin approach (Baertsch 2002) to syllable organization.
- To show that, to formalize the whole variation, both a) markedness constraints related to intrasyllabic organization (Baerstch 2002) and b) markedness constraints referring to the harmony of segments in intervocalic position (Kirchner 1998; Uffmann 2005) are necessary.

2.2 Theoretical assumptions

2.2.1 Assumptions about the sonority scale

(2) Assumed sonority scale

\[
\text{GLIDE}_{[-\text{HIGH}]} > \text{GLIDE}_{[+\text{HIGH}]} > \text{LIQUIDS} > \text{NASALS} > \text{FRICATIVES} > \text{STOPS}
\]

\[
(l\epsilon, [\epsilon]) \quad (l[j, [w])
\]

higher sonority \hspace{1cm} lower sonority

(3) Sonority distinctions (relevant for Majorcan Catalan)

\[
\text{GLIDE}_{[-\text{HIGH}]} > \text{GLIDE}_{[+\text{HIGH}]} > \text{LIQUIDS} > \text{NASALS} > \text{FRICATIVES} > \text{STOPS}
\]

\[
(l\epsilon, [\epsilon]) \quad (l[j, [w])
\]

Augmented

- \([\epsilon] \& [\epsilon] = \text{centralized and open (non-high) glides, i.e. GLIDE}_{[-\text{HIGH}]}\]
- \([j] \& [w] = \text{peripheral and closed (high) glides, i.e. GLIDE}_{[+\text{HIGH}]}\]

[For the articulatory and the acoustic differences between \([j] \& [\epsilon], \text{see Mascaro} \& \text{Rafel (1981) and Recasens} \& \text{Espinosa (2005).}]

2.2.2 Formal assumptions

(4) The Split Margin approach to syllable organization

The Split Margin approach refines Prince & Smolensky’s hierarchy (1993/2004) by establishing a straightforward correlation between the constituents of the syllable. This hierarchy identifies three types of constituents that behave alike (5) and which are logically targeted by three distinct universal hierarchies (6): M1, which stands for a singleton onset, for the first element of a complex onset and for the second element of a complex coda; M2, which stands for a singleton coda, for the second element of a complex onset and for the first element of a complex coda; and P, standing for the peak.

(5) Associated syllabic constituents (Baertsch 1998, 2002)

\[
\begin{array}{c}
\sigma \\
\text{Onset} \\
\text{Rhyme} \\
\text{Nucleus} \\
\text{Coda} \\
\end{array}
\]

\[
\begin{array}{c}
\text{M1} \\
\text{M2} \\
P \\
\text{M2} \\
\text{M1} \\
\end{array}
\]

\[
\ldots = \text{irrelevant here}
\]

(6) Constraint hierarchies affecting the margins (M1 & M2)

- The constraint hierarchy governing the M1 constituent gives preference to low sonority segments (6a):
  
  a. Constraint hierarchy for M1 (*M1/\lambda_

  *M1/GLIDE_{[-\text{HIGH}]} >> *M1/GLIDE_{[+\text{HIGH}]} >>

  b. The constraint hierarchy governing the M2 constituent gives preference to high sonority segments (6b):

  b. Constraint hierarchy for M2 (*M2/\lambda_

  *M2/GLIDE_{[+\text{HIGH}]} >> *M2/GLIDE_{[-\text{HIGH}]}

[For the articulatory and the acoustic differences between \([j] \& [\epsilon], \text{see Mascaro} \& \text{Rafel (1981) and Recasens} \& \text{Espinosa (2005).}]

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(7) Segmental preferences in intervocalic position

In intervocalic position (and also in postvocalic and preglide position), elements of high sonority are preferred, because this simplifies the articulatory gesture (Kirchner 1998; Uffmann 2005). (→ Involved in processes of lenition & in the quality of the epenthetic segments.) → Smooth VCV transitions.

(8) Constraint hierarchy for M1 in intervocalic position (*VλM1V)

- The constraint hierarchy governing the VM1V constituent gives preference to high sonority segments as well (8a):
  
  a. Constraint hierarchy for intervocalic M1 (*VλM1V)

  *VS TOP M1 V >> *VF RICATIVE M1 V >> *VN ASAL M1 V >> *VL LIQUID M1 V

  *VG LIDE [+HIGH], M1 V >> *VG LIDE [–HIGH], M1 V

  *M1/G LIDE [–HIGH] >> *M1/G LIDE [+HIGH]

  *VG LIDE [+HIGH], M1 V >> *VG LIDE [–HIGH], M1 V

  In intervocalic position...

  Crucial interaction between both constraint hierarchies

(9) Word-initial position (mostly loanwords) → preservation

<table>
<thead>
<tr>
<th>Most varieties</th>
<th>Some other varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td>[j]anqui 'Yankee'</td>
<td>[j]ogurt 'yogurt'</td>
</tr>
<tr>
<td>[j]ate 'yacht'</td>
<td>[j]ot 'yacht'</td>
</tr>
<tr>
<td>[j]ode 'iodine'</td>
<td></td>
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<td>[j]ogurt 'yogurt'</td>
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(10) Intervocalic position → weakening / deletion (in contact with non-front vowels)

<table>
<thead>
<tr>
<th>a. Varieties A</th>
<th>b. Varieties B</th>
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<tbody>
<tr>
<td>bada[ø]a</td>
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</tr>
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</tr>
<tr>
<td>ta[ø]a</td>
<td>ta[Ø]a</td>
</tr>
<tr>
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</tr>
<tr>
<td>fe[ø]a</td>
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</tbody>
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\[\text{Going Romance 29 (Nijmegen, The Netherlands)} \quad 10-12 \text{ December 2015} \]

3 MAJORCAN CATALAN: A MULTIPLE-WAY ADJUSTING VARIETY

3.1 Data

[Data from Bibiloni (1983), Dols (2000) and personal inquiries]

3.1.1 The palatal glide

→ SIMPLEX ONSET POSITION

(σ)

Onset \hspace{1cm} \hspace{1cm} Rhyme

Nucleus \hspace{1cm} Coda

M1 [M2] P M2 [M1]

(9) Word-initial position (mostly loanwords) → preservation

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<td>ta[Ø]a</td>
</tr>
<tr>
<td>du[ø]a</td>
<td>du[Ø]a</td>
</tr>
<tr>
<td>fe[ø]a</td>
<td>fe[Ø]a</td>
</tr>
</tbody>
</table>
(11) Intervocalic position → deletion
   (in contact with the front vowel i)

   All varieties (A, B)
   f[ij]a ‘daughter’ (cf. ji[j], but also fi[Ø], ‘son’)
   con[ij]era ‘burrow’ (cf. coni[j], but also coni[Ø], ‘rabbit’)
   ve[ij]issim ‘old MASC. SUPERL.’ (cf. vej], ‘old MASC.’)
   embu[Ø]i ‘he mixes up SUBJ.’ (cf. embu[j], ‘I mix up’)

(12) Intervocalic position → deletion (and weakening)
   (in contact with the front vowel e)

   All varieties (A, B) Varieties A
   ve[Ø]a (vella, ‘old FEM.’) ve[e]ura ‘old age’
   ve[Ø]et (vellet, ‘old man DIM.’) agu[e]er ‘thread’
   ve[Ø]ona (vellona, ‘old woman DIM.’)

(13) Intervocalic position (clitic sequences) → weakening / deletion (as in (10))

   Varieties A Varieties B
   No hi [e] ha ningún No hi [Ø] ha ningún ‘There is nobody’
   No hi [e] he anat, a París No hi [Ø] he anat, a París ‘I didn’t go, to Paris’
   (# No he anat a París) (= No he anat a París) ‘I didn’t go to Paris’
   hi [æ] ha hi [sØ] ha ‘there is’
   hi [æ] hagi hi [sØ] hagi ‘there is SUBJ.’

   (Cf. hi [s] va ‘he goes there’; hi [s] veu, ‘he is able to see’)

→ Productivity of the processes of weakening and deletion

(14) Morphophonemic alternations (inflection & derivation)

   du[e]a ~ du[Ø]a ‘I was bringing’ vs. du[j]s, du[j]m ‘you, we bring’
   ta[g]et ~ ta[Ø]et ‘cut DIM.’ vs. ta[j], ta[j]s ‘cut, cuts’

(15) Phrasal phonology

   ma[e] he dit vs. ma[j]
   ‘I have never said’ ‘never’

(16) Loanwords and L2 phonology

   Juga a la Pla[Ø] ara vs. Pla[j]
   ‘Play with the Play now’ ‘Play (Station)’

   Estàs on [fae] ‘You are on fire’

→ CODA POSITION

Onset Rhyme Nucleus Coda

M1 [M2] P M2 [M1]

(17) Word-final and word-internal position

   All varieties (A, B)
   ma[j] ‘never’ esca[j]re ‘corner’
   re[j] ‘king’ ca[j]re ‘aspect’
### 3.1.2 The labiovelar glide

→ **ONSET POSITION**

\[
\text{Onset} \rightarrow \text{Rhyme} \rightarrow \text{Nucleus} \rightarrow \text{Coda}
\]

\[
\begin{array}{c|c|c|c}
\text{M1} & \text{M2} & \text{P} & \text{M2} \rightarrow \text{M1} \\
\end{array}
\]

(18) Word-initial position (mostly loanwords) → preservation

*All varieties (I, II)*

[w]'ep! ‘hey!’

[w]eb ‘website’

[w]isky ‘whisky’

[w]atsapp ‘whatsapp’

[w]ifi ‘Wi-Fi’

(19) Intervocalic position → preservation / “strengthening”

*Varieties I*      *Varieties II*

c[a][w]en  c[a][v]en ‘they fall’ (cf. *ca*[w], ‘(s)he falls’)
d[i][w]en  d[i][v]en ‘they say’ (cf. *di*[w], ‘(s)he says’)
cr[e][w]eta  c[r][e][v]eta ‘cross DIM.’ (cf. *cre*[w], ‘cross’)
pe[w]et  p[e][v]et ‘foot DIM.’ (cf. *pe*[w], ‘foot’)

(20) Intervocalic position (across words) → preservation / “strengthening”

*Varieties I*      *Varieties II*

es me[w] amic  es me[v] amic ‘my friend’ (cf. *es me*[w], ‘my’)
bla[w] i blanc  bla[v] i blanc ‘blue and white’ (cf. *bla*[w], ‘blue’)

→ **CODA POSITION**

\[
\text{Onset} \rightarrow \text{Rhyme} \rightarrow \text{Nucleus} \rightarrow \text{Coda}
\]

(21) Intervocalic position → deletion / “strengthening” (in contact with a labial mid back vowel)

*Varieties I*      *Varieties II*

bo[Ø]et  bo[v]et ‘ox DIM.’ (cf. *bo*[w], ‘ox’)
po[Ø]al  po[v]al ‘bucket’ (cf. *po*[w], ‘well’)
es me[Ø] homo  es me[v] homo ‘my husband’ (cf. *es me*[w], ‘my’)
co[Ø] un poc  co[v] un poc ‘(s)he cooks a little’ (cf. *co*[w], ‘(s)he cooks’)
po[Ø] immens  po[v] immens ‘huge well’ (cf. *po*[w], ‘well’)

→ **Productivity of the process of strengthening**

Dubious: see (31).
3.2 Descriptive generalizations and analysis

Intervocalic position (V₂M₁V)

3.2.1 Varieties with weakening of the palatal glide (see 10a: bada[ɬa]) and conditioned (apparent) deletion (see 11: f[ɬa]; see 12: ve[ɬa])

Descriptive generalization: A process of weakening applies intervocally, unless the palatal glide and the adjacent vowel are similar enough (i.e. share the feature [palatal]), in which case a process of fusion (“apparent deletion”) is triggered.

(23) Weakening in contact with a non-front (non-palatal) vowel

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>[ɬa]</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>[ɬa]</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>[ɬa]</td>
<td></td>
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<td></td>
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<tr>
<td>d.</td>
<td>[ɬa]</td>
<td>*</td>
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</tbody>
</table>

B. Partial rankings and ranking arguments:

B1. MAX-[PAL], *VGlide[front]V, Id-[PAL]
    → tie between weakening and fusion (24b vs. 24d)

    (emergence of *M₁/GLIDE[front], *VGlide[front]V)
    → fusion over weakening (24b vs. 24d)

3.2.2 Varieties with generalized deletion (see 10b: bada[ɬa]; 11: f[ɬa]; 12: ve[ɬa]).

Descriptive generalization: A process of deletion applies intervocally, unless the palatal glide and the adjacent vowel are similar enough (i.e. share the feature [palatal]), in which case a process of fusion is triggered. (The last process is identical to the one found in varieties with weakening / fusion.)
(25) Deletion in contact with a non-front (non-palatal) vowel

<table>
<thead>
<tr>
<th>f[i, i] + o</th>
<th>*VGLIDE&lt;cont&gt;M</th>
<th>ID-[PAL]</th>
<th>Id-[cons]</th>
<th>ONSET</th>
<th>*M/GLIDE&lt;cont&gt;M</th>
<th>*VGLIDE&lt;cont&gt;M</th>
<th>Max-[PAL]</th>
<th>*M/GLIDE&lt;cont&gt;M</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [i, i]</td>
<td>*!</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
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<tr>
<td>b. [i, i]</td>
<td>*!</td>
<td></td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
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<tr>
<td>c. [i, i]</td>
<td>*!</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>d. [i, i]</td>
<td>*!</td>
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</tbody>
</table>

C. Partial ranking and ranking argument:

C1. Demotion of MAX-[PAL]:

\[
\text{MAX-[PAL]} >> \text{*M/GLIDE<cont>M} \Rightarrow \text{MAX-[PAL]}
\]

→ deletion over weakening (25c vs. 25b)

C2. ID-[PAL] prevents from fusion

(26) Fusion in contact with a front (palatal) vowel

<table>
<thead>
<tr>
<th>f[i, i] + o</th>
<th>*VGLIDE&lt;cont&gt;M</th>
<th>ID-[PAL]</th>
<th>Id-[cons]</th>
<th>ONSET</th>
<th>*M/GLIDE&lt;cont&gt;M</th>
<th>*VGLIDE&lt;cont&gt;M</th>
<th>Max-[PAL]</th>
<th>*M/GLIDE&lt;cont&gt;M</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [i, i]</td>
<td>*!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. [i, i]</td>
<td>*!</td>
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<td>*!</td>
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<td></td>
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<tr>
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<td>*!</td>
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</tbody>
</table>

D. Partial ranking and ranking argument:

D1. Emergence of MAX-[PAL]

→ fusion over deletion (26d vs. 26c)

### Summary:

- In contact with a non-front vowel → different rankings / different outcomes (weakening vs. deletion)
- In contact with a front-vowel → different rankings / identical outcomes (fusion = fusion)

### 3.2.3 Varieties with preservation of the labiovelar glide (19a: ca[w]en; 20a: es me[w] amic) and conditioned deletion (21a: bo[∅]et; es me[∅] homo).

**Descriptive generalization:** There is preservation intervocally, unless the labiovelar glide and the adjacent vowel are similar enough (i.e. share the feature [labial]), in which case a process of fusion is triggered.

Remind! Different fates for the palatal glide intervocally, relevant here:

→ Varieties with weakening of /l/ and preservation of /w/: Same ranking as in (23), for the weakening of the palatal glide, plus *[^q] and MAX-[PAL] → MAX-[LAB]; ID-[PAL] → ID-[LAB].

→ Varieties with deletion of /l/ and preservation of /w/: Same ranking as in (25), for the deletion of the palatal glide, plus *[^q] and MAX-[PAL] → MAX-[LAB]; ID-[PAL] → ID-[LAB] BUT NO demotion of MAX-[LAB].

Note how this last pattern (with deletion of /l/ and preservation of /w/) makes it necessary to split MAX(F) into MAX-[PAL] and MAX-[LAB] (i.e. they need to be freely rankable in order to explain the opposite behaviors).
(27) Preservation (in contact with a non-labial mid back vowel)

<table>
<thead>
<tr>
<th>p/ɔ₁w₂+ɔ/t</th>
<th>*[ɛ]</th>
<th>M-[L,AB]</th>
<th>*VGLIDE[+mid],M₁,V</th>
<th>Id-[LAB]</th>
<th>Id-[cons]</th>
<th>ONSET</th>
<th>+M1/GLIDE[+mid],M₁</th>
<th>+VGLIDE[+mid],M₁</th>
<th>+M1/GLIDE[+mid]</th>
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<tbody>
<tr>
<td>[a₃]</td>
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E. Partial rankings and ranking arguments:

E1. *[q], MAX-[LAB], *VGLIDE[+mid],M₁,V, ID-[LAB]
   → tie between preservation (27a), weakening (27b), deletion (27c) and fusion (27d)

E2. ID-[LAB] blocks fusion

   → preservation (27a) over other strategies (27b, c, d)

E4. ONSET is decisive for the first time.

(28) Fusion ("apparent deletion") in contact with a labial mid back vowel

<table>
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<tr>
<td>[a₂]</td>
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<td>[a₁]</td>
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<tr>
<td>[a₀]</td>
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</tbody>
</table>

F. Partial rankings and ranking arguments:

F1. *VGLIDE[+mid],M₁,V >> ONSET
   → fusion (28d) over preservation (28a)

F2. ID-[LAB] satisfied by the candidate with fusion


(29)  

→ Ranking for the weakening of the palatal glide:

*VGLIDE[+monotonic],M₁,V >> *M1/GLIDE[+non]- *VGLIDE[+monotonic],M₁,V

→ Universal ranking (fixed):

*VFRICATIVE,M₁,V >> *VGLIDE[+monotonic],M₁,V

→ By transitivity:

*VFRICATIVE,M₁,V >> *VGLIDE[+monotonic],M₁,V >> *M1/GLIDE[+non]- *VGLIDE[+monotonic],M₁,V

(Weakening is always better than strengthening)

→ Considering *[q]... and given *VFRICATIVE,M₁,V >> *VGLIDE[+monotonic],M₁,V

(Preservation is always better than strengthening, and weakening)

(30) Illustration: universal ranking
(31) Some empirical observations:

- The strengthening of the labiovelar glide in intervocalic position is a dubiously productive process (at least synchronically), since loans or learned words such as Hawaii, Power or PowerPoint are usually realized with [w]. (Also across words: Glasgow ha guanyat ‘Glasgow has won’.)
- This strengthening is not common in word-initial position, where it would be more justifiable (see 18) because the affected segment is not preceded by a vowel.
- There is an intricate diachronic evolution of words containing the alternation [v] ~ [w]:
  - first stage: intervocalic [v] (be[v]en ‘they drink’);
  - second stage: intervocalic [w] (be[w]en, as in other Catalan varieties), probably by analogy to the form be[w] ‘is/he drinks’;

(32) Subsequent assumptions about the UR:

- We assume that the underlying representation of forms showing the alternation [w] ~ [v] (as del[w] ~ del[v]en) displays two allomorphs, one with a final voiced labiodental fricative (/div/) and the other with a final labiovelar glide (/diw/).

- We presume that the two allomorphs appear with the lexical precedence ‘fricative>glide’, as in (/div/>/diw/) for the stem of diuen (on lexically ordered allomorphs, see Bonet et al. 2007 and Mascaro 2007).
  → There is an independent argument for giving precedence to the fricative: the labiodental fricative is the variant appearing in onset position, which, as known, is a neutral position that favors faithfulness and thus avoids alterations (Beckman 2001).
  → The preference for the dominant allomorph is ensured by the constraint PRIORITY: “Respect lexical priority (ordering) of allomorphs” (Bonet et al. 2007: 902; Mascaro 2007: 726).

(33) Selection of the allomorph with final /v/

\[
\begin{array}{|c|c|c|c|c|c|c|c|}
\hline
 & /\text{div}_1 > \text{diw}_2\text{en}/ & \text{PRIORITY} \rightarrow \text{VFRICTIVE}_3\text{M}1\text{V} & & & & & \\
\hline
 & & * & & & & & \\
\hline
 a. [di.vən] & * & & & & & & \\
\hline
 b. [di.wən] & *! & * & & & & & \\
\hline
 c. [di.ɔwən] & *! & * & & * & * & & \\
\hline
\end{array}
\]

(Simplified tableau)

F. Ranking argument:

F1: PRIORITY >> *VFRICTIVE3M1V
  → selection of the preferred allomorph, in spite of having an intervocalic fricative
## Word-initial position (#M1/V)

(34) Varieties with intervocalic weakening and word-initial preservation of $/[j/ + intervocalic preservation and word-initial preservation of $/[w/]

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>a. $[j₁o₂]</td>
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<tr>
<td>b. $[q₁o₂]</td>
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<tr>
<td>c. $[o₂]</td>
<td>$!</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
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<tr>
<td>d. $[d₂]</td>
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<td></td>
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<tr>
<td>e. $[d₃]</td>
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<td>*</td>
<td></td>
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<tr>
<td>f. $[j₂]</td>
<td></td>
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<td>*</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>/w₁e₂/b</th>
<th>*w</th>
<th>M[AX][LAB]</th>
<th>D[LAB]</th>
<th>D[CONS]</th>
<th>*M/GLIDE&lt;1</th>
<th>*M/GLIDE&lt;2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $[w₁e₂]</td>
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<td></td>
</tr>
<tr>
<td>b. $[q₁e₂]</td>
<td>$!</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>c. $[e₂]</td>
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<td></td>
</tr>
<tr>
<td>d. $[v₁]</td>
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</tbody>
</table>

G. Partial ranking and ranking arguments:

G1. Emergence of the $*M1/\delta$ hierarchy
G2. D[CONS] >> *M/GLIDE<1 >> ... >> *M/FRIC
   → preservation (34a [1st & 2nd tableaux]) over strengthening strategies (34d [1st & 2nd tableaux], c, f)

H. Partial ranking and ranking arguments:

H1. Emergence of the $*M1/\delta$ hierarchy
H2. D[CONS] >> *M/GLIDE<1 >> ... >> *M/FRIC
   → preservation (35a [1st & 2nd tableaux]) over strengthening strategies (35d [1st & 2nd tableaux], c, f)
Word-final position ($\lambda M_2$)

(36) Selection of the allomorph with final /w/ (cf. (33))

<table>
<thead>
<tr>
<th>/{div_1 &gt; diw_2}/</th>
<th>*M2/FRICATIVE</th>
<th>Id-[+cons]</th>
<th>Id-[HI]</th>
<th>*M2/GLIDE_{[+HI]}</th>
<th>*M2/GLIDE_{[-HI]}</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [diw_1]</td>
<td>*!</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. [diw_2]</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. [diw_2]</td>
<td>*</td>
<td>*</td>
<td></td>
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</tr>
</tbody>
</table>

I. Partial ranking and ranking arguments:

1. Emergence of the *M2/λ hierarchy

2. *M2/FRICATIVE >> PRIORITY
   → selection of the second choice allomorph (36b) over the default allomorph (36a)

3. Id-[HI] >> *M2/GLIDE_{[+HI]} >> *M2/GLIDE_{[-HI]}
   → general preservation of high glides (36b) over lowered glides, more harmonic as M2 (36c)

4. CENTRAL EASTERN CATALAN: A NON-ADJUSTING VARIETY

   • Always preservation of the glides, as M2 & also as M1.
     → Central Eastern Catalan is a faithful variety in which the markedness constraints
       *M2/GLIDE_{[+HI]}, *M1/GLIDE_{[+HI]} and VGLIDE_{[-HI],M1} are consistently outranked by
       the relevant faithfulness constraints.

(For more, see Jiménez et al. in press.)

5. CASTILIAN SPANISH: A ONE-WAY ADJUSTING VARIETY

   • M2: Always preservation of the glides.
     → The markedness constraint *M2/GLIDE_{[+HI]} is outranked by the relevant
       faithfulness constraints.

   • M1: Always strengthening (via splitting of /w/ both in word-initial and intervocalic
     position; via affrication of /j/ in word-initial position and via fricativization in
     intervocalic position)
     → Word-initial M1: /j/ & /w/ maximally reinforced. *M1/GLIDE_{[+HI]} is located at the
       top of the ranking, crucially above the relevant faithfulness constraints.
     → Intervocalic M1: /j/ & /w/ reinforced, but not maximally. In our approach, this is
       due to the conjoined action of *M1/GLIDE_{[+HI]} and *VS_{TOP}M1 at the top of the
       ranking as well; as a result, neither the best consonants (an affricate or a stop) nor
       the worst ones (glides) in M1 are available as intervocalic M1.

(For more, see Jiménez et al. in press)

6. FINAL REMARKS

   — The Split Margin Hierarchy (Baertsch 2002) induces most of the variation that
     Catalan & Spanish display:
     → Less sonorous segments are preferred in M1.
     → More sonorous segments are preferred in M2.

   — We must consider, though, segmental strings to incorporate specific requirements
     affecting intervocalic onsets, where more sonorous segments are also preferred.

   — The behavior of /j/ in Majorcan Catalan shows that the intervocalic position is not a
     structural version of M2, but a position with specific demands; in this case, an even
     lower degree of stricture than in M2 (due to *VGLIDE_{[-HI],M1}).

   — In Majorcan Catalan, the effects of *VGLIDE_{[-HI],M1} are so strong, that not only a
     process of weakening (lenition) applies, but also various processes of contextually
     conditioned and not conditioned deletion (at the expense of violating ONSET).
REFERENCES


CONSTRAINT DEFINITIONS

Faithfulness constraints

ID-[P]AL]: Assign one violation mark for every palatal segment in S₁ whose output correspondent in S₂ is not palatal (see McCarthy & Prince 1995).

ID-[L]AB]: Assign one violation mark for every labial segment in S₁ whose output correspondent in S₂ is not labial (see McCarthy & Prince 1995).

ID-[–cons]: Assign one violation mark for every [–consonantal] segment in S₁ whose output correspondent in S₂ is not [–consonantal] (see McCarthy & Prince 1995).

MAX-[P]AL]: Assign one violation mark for every palatal segment in S₁ that has no correspondent in S₂ (see McCarthy & Prince 1995).

MAX-[L]AB]: Assign one violation mark for every labial segment in S₁ that has no correspondent in S₂ (see McCarthy & Prince 1995).

PRIORITY: Respect lexical priority (ordering) of allomorphs (Bonet et al. 2007: 902; Mascaró 2007: 726).

Markedness constraints

*M1/GLIDE-[HI]: Assign one violation mark for every [–HI] glide syllabified as the first element in an onset (it belongs to a universal constraint hierarchy; see Baerstch 2002).

*M1/GLIDE+[HI]: Assign one violation mark for every [+HI] glide syllabified as the first element in an onset.

*VFRICATIVE: Assign one violation mark for every fricative syllabified in onset position and placed in intervocalic position (it belongs to a universal constraint hierarchy; see Baerstch 2002).

*VGLIDE-[HI]: Assign one violation mark for every glide syllabified in onset position and placed in intervocalic position.

*[Q]: Assign one violation mark for every glide specified as labial and [–HI] (feature co-occurrence / inventory constraint)