

# ADJUSTING THE GLIDES TO THE SYLLABLE MARGINS

Jesús Jiménez  
Universitat de València  
jesus.jimenez@uv.es

Maria-Rosa Lloret  
Universitat de Barcelona  
mrosa.lloret@ub.edu

Clàudia Pons-Moll  
Universitat de Barcelona  
claudia.pons@ub.edu

**TOPIC:** In Catalan & in Castilian Spanish, the labiovelar glide /w/ & the palatal glide /j/ display a vast array of **variation** when appearing as the first element in an onset (in **Margin 1**), whereas there is almost **no variation** when they appear in codas and as the second element in an onset (in **Margin 2**).

**GOALS:** (a) To study the **variation** that glides present in syllable margins in Catalan & in Spanish and to prove that the elements replacing the glides **fit better** in the syllabic positions in which they appear  
(b) To show that **Margin 1 & Margin 2 (M1 & M2)** positions make opposite requirements wrt the sonority of the segments (in line with Baertsch 2002).  
(c) To demonstrate that, to formalize the whole variation, we need constraints related to the syllable (**intrasyllabic**; cf. Baertsch 2002) and constraints referred to segmental strings (**intersyllabic**; cf. Kirchner 1998, 2004; Uffmann 2005).

### 1. SYLLABIC POSITIONS & BASIC CONSTRAINT SET

> Associated syllabic constituents (Baertsch 2002):

> Sonority scale:  
Stops & Affric. > Fricatives >...> High glides > Non-high glides  
[w], [j] [ɔ], [e]

> Segmental preferences in M1 & M2:  
✓ M1, preference for low sonority segments:  
\*M1/GLIDE<sub>[-HIGH]</sub> >> \*M1/GLIDE<sub>[+HIGH]</sub> >> \*M1/FRIC >> \*M1/STOP  
✓ But in intervocalic M1, preference for high sonority segments:  
\*VSTOP<sub>M1</sub>V >> \*VFRIC<sub>M1</sub>V >> \*VGLIDE<sub>[+HI],M1</sub>V >> \*VGLIDE<sub>[-HI],M1</sub>V  
✓ M2, preference for high sonority segments as well:  
\*M2/STOP >> \*M2/FRIC >> \*M2/GLIDE<sub>[+HIGH]</sub> >> \*M2/GLIDE<sub>[-HIGH]</sub>

### 3. FAITHFULNESS OVER MARKEDNESS II: PRESERVATION OF GLIDES IN M1 IN CENTRAL EASTERN CATALAN

> Faithful mapping in M1: In Central Eastern Catalan, glides are **maintained** unchanged (in patrimonial words and in loanwords) in the first position of an onset (M1).

Preservation of glides in M1 in Central Eastern Catalan  
[w]eb 'web' di[w]en 'they say'  
[j]ogurt 'yogurt' fe[j]a 'it did'

> Main ranking: Faithfulness constraints (IDENT-GLIDE, IDENT-HIGH...) outrank \*M1/GLIDE<sub>[+HIGH]</sub> & \*VGLIDE<sub>[+HI],M1</sub>V.

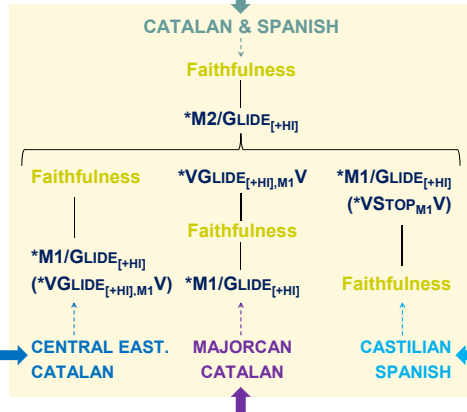
### 2. FAITHFULNESS OVER MARKEDNESS I: GENERAL PRESERVATION OF GLIDES IN M2

> Faithful mapping in M2: In the second position of an onset and in coda position (M2), both glides **always remain unaltered** in Catalan & in Spanish:

Catalan  
q[w]an 'when' di[w] 's/he says'  
miss[j]ó 'mission' re[j] 'king'

Spanish  
d[w]eño 'owner' ja[w]la 'cage'  
p[j]e 'foot' re[j] 'king'

> Main ranking: Faithfulness constraints (IDENT-GLIDE, IDENT-HIGH...) outrank \*M2/GLIDE<sub>[+HIGH]</sub>.



### 4. MARKEDNESS OVER FAITHFULNESS: ONSET STRENGTHENING IN CASTILIAN SPANISH

> Unfaithful mapping in M1: In Castilian Spanish, glides are **always reinforced** in the first position of an onset (M1), but to different degrees:

	Maximally	Non-maximally
[g]welo 'I smell'	a[j]wlecar 'to hollow'	
[d]jugo 'yoke'	ma[j]jo 'May'	

> Word-initial M1: Extreme reinforcement arises because \*M1/GLIDE<sub>[+HI]</sub> is located at the top of the ranking, crucially above ID-GLIDE.

[j], [u]go	VSTOP <sub>M1</sub> V	*M1/GLIDE <sub>[+HI]</sub>	*M1/FRIC	ID-GLIDE
a. [j], [u]		*!		
b. [d], [u]			*!	*
✓ c. [d], [u]				*

> Intervocalic M1: Glides are reinforced, but not maximally, as a result of the **conjoined action** of \*M1/GLIDE<sub>[+HI]</sub> and \*VSTOP<sub>M1</sub>V at the top of the ranking.

m/[a]j/o/	VSTOP <sub>M1</sub> V	*M1/GLIDE <sub>[+HI]</sub>	*M1/FRIC	ID-GLIDE
a. [a], [j]o		*!		
✓ b. [a], [j]o			*	*
c. [a], [d]j,o	*!			*

> One could certainly suggest that the underlying representations of *huelo* and *yugo*, e.g., already contain the consonants /g/ and /j/ (or /d,j/), respectively, but the reinforcement is **still active** in:  
✓ Recent loanwords: *wasapear* - *guasapear* 'to whatsapp'.  
✓ Second language acquisition: [g]w<sub>ater</sub> 'water', [d]j<sub>ou</sub> 'you'  
✓ Glides deriving from underlying vowels: [j] *tú* 'and you', [d]j *un día* 'and one day', *amigo* [j] *amiga* 'boyfriend and girlfriend'.

### 5. FAITHFULNESS AND MARKEDNESS: WEAKENING & STRENGTHENING OF GLIDES IN MAJORCAN CATALAN

> Faithful mapping in word-initial M1: Majorcan Catalan allows glides as word-initial M1; i.e., the markedness constraint \*M1/GLIDE<sub>[+HI]</sub> must also be consistently outranked by the relevant faithfulness constraints (IDENT-GLIDE, IDENT-HIGH...).

Preservation of glides in word-initial M1  
[w]eb 'web' [j]ogurt 'yogurt'

> Unfaithful mapping of intervocalic /j/: /j/ is either realized as a slightly more centralized and open glide [e] (cf. Mascaró & Rafel 1981; Recasens & Espinosa 2005) or is completely deleted:

Weakening/deletion of /j/ in intervocalic M1  
fe[j]a - fe[ɔ]a 's/he did'  
ta[ɛ]ar 'to cut' (cf. ta[j] 'I cut')  
ma[ɛ] he dit 'I have never said' (cf. ma[j] 'never')

> Unfaithful mapping of intervocalic /w/: /w/ is usually **strengthened** into a fricative [v]:  
Strengthening of /w/ in intervocalic M1  
di[v]en 'they say' (cf. di[w] 's/he says')

> Unfaithful mapping of intervocalic /j/: Given that glides are allowed in the strongest position —the initial position—, we expect them to be allowed intervocalically as well, unless...  
...even less constricted segments are required by the pressure of the constraint \*VGLIDE<sub>[+HI],M1</sub>V in the ranking:  
\*VGLIDE<sub>[+HI],M1</sub>V, ID-GLIDE >> \*M1/GLIDE<sub>[-HI]</sub>

> With this ranking, the high glide [j] is **not sonorous enough** to appear intervocalically and is replaced by the non-high glide [e]:

[f]e <sub>i</sub> +a/	*VGLIDE <sub>[+HI],M1</sub> V	ID-GLIDE	*M1/GLIDE <sub>[-HI]</sub>
✓ a. [ɛ, ɔ, e]			*
b. [ɛ, j, e]	*!		
c. [ɛ, j, e]		*!	

> Problem for the analysis: We would expect the labiovelar glide to surface intervocalically as a **non-high glide** [ɔ]: i. e., *diuen* [di.ɔn]. That is, it does not seem possible to derive the opposite outcomes for the intervocalic palatal glide and the labiovelar glide from the same ranking.

> Unfaithful mapping of intervocalic /w/, possible solution: For alternations such as *diu* [diw] / *diuen* [di.vən], we could assume that the root displays **two allomorphs**, one with the labiovelar glide (*diw*) and the other with the labiodental fricative (*div*).

> Moreover, we presume that the two allomorphs appear with the **lexical precedence** 'fricative>glide', as in {div>diw} for the root of *diuen*.

> The preference for the dominant allomorph is ensured by the **PRIORITY** constraint: "Respect lexical priority (ordering) of allomorphs" (Bonet et al. 2007: 902; Mascaró 2007: 726).

> Hence, the **fricative is selected** between vowels, even though this outcome violates \*VFRIC<sub>M1</sub>V.

{/div/ > /diw/}+en/	PRIOR	VFRIC <sub>M1</sub> V	*VGL <sub>[+HI],M1</sub> V	ID-GL	*M1/GL <sub>[-HI]</sub>
a. [i, ɔ, e]	*!				*
b. [i, w, e]	*!		*!		
✓ c. [i, v, e]		*			

### 6. CONCLUDING REMARKS

> The **split margin hierarchy** (Baertsch 2002) motivates most of the variation that Catalan & Spanish glides display:  
✓ More sonorous segments are preferred in M2  
✓ Less sonorous segments are preferred in M1

> We must consider, though, **segmental strings** to incorporate particular requirements affecting intervocalic onsets.

> 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 on its own**; in this case, a lower degree of stricture than M2.

> Given the **inclusive relationship** between **M1 & intervocalic M1 positions** (all intervocalic M1 are M1), we expect that if a segment with some degree of sonority (e.g., a high glide) is allowed word-initially, segments with either the same degree of sonority (as in Central Eastern Catalan) or with a higher degree (as in Majorcan Catalan) should be allowed intervocalically as well.

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