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Adjusting the glides to the syllable margins

The asymmetric behavior of the two syllable margins (i.e., onset and coda) is usually accounted for by means of intrasyllabic sonority conditions, according to which many modifications affecting onsets are of strengthening type whereas the ones affecting codas are usually weakening phenomena (see, e.g., Clements 1990, Baertsch 2002, Smith 2005). These generalizations, though, have to get along with other preferences that languages show, which in some cases may challenge each other. For example, in contrast with the tendency to strengthen onsets, other contextual markedness conditions favor alternative options, as in intervocalic position, where less constricted onsets are preferred in order to be more homogeneous in sonority with the surrounding vowels (see, e.g., Kirchner 1998). The purpose of this paper is to bring together data from several varieties of Spanish and Catalan to investigate the behavior of glides (i.e., /j/ and /w/) in onsets and codas and to illustrate the entwined of the aforementioned tendencies and the adequacy of Optimality Theory (OT) in dealing with them. More specifically, the account we provide supports the distinction proposed by Baertsch (2002) between elements which are parsed as the leftmost element in the onset (M1) and elements which are syllabified as codas or as the second element in the onset (M2), although sometimes an explicit reference to the intersyllabic context in which M1 elements may appear is also required.

To begin with, the Castilian Spanish data illustrate a case of a *one-way adjusting variety*. Castilian Spanish glides follow the general tendency of remaining weak both in coda position (*ja*[w]*la* 'cage', *re*[j] 'king') and as a second element of a complex onset (*d*[w]*eño* 'owner', *p*[j]*e* 'foot'), which is captured in the analysis through the low ranking of the constraints referred to the glides in the *M2/λ hierarchy (Baertsch 2002). Likewise, they follow the general tendency of strengthening in onsets, either in word-initial position (*huelo* /welo/: [ˈgwelo] 'I smell', [gw]*eb*, *hierba* /jeɾba/: [ˈɟjeɾβa] 'grass') or in word-internal position (*cacahuete* /kakawete/: [kakaˈɣwete] 'peanuts', *mayo* /majo/: [ˈmaɟo] 'May'), which reveals that in Castilian Spanish a glide is not allowed as the first element of an onset as a result of the pressure exerted by *M1/GLIDE at the top of the ranking.

Contrariwise, Central Eastern Catalan illustrates the case of a *non-adjusting variety*. As in Castilian Spanish, preservation without changes is the regular outcome for glides in codas (*di*[w] 'he says', *re*[j] 'king') and in the second position of onsets (*q*[w]*estió* 'question', *miss*[j]*ó* 'mission'); however, both /w/ and /j/ tend to be maintained in simplex onsets as well ([w]*eb*, *di*[w]*en* 'they say'; [j]*ogurt*, *fe*[j]*a* 'I did'). Central Eastern Catalan is, thus, a faithful variety in which the markedness constraint *M1/GLIDE is consistently outranked by the faithfulness constraint IDENT-GLIDE.

Finally, Majorcan Catalan illustrates a case of a *two-way adjusting variety*. Although this variety does not differ from Central Eastern Catalan in the treatment of glides in codas (*di*[w], *re*[j]) and in the second position of onsets (*q*[w]*estió*, *miss*[j]*ó*), regarding simplex onsets it imposes much stronger requirements on glides than Central Eastern Catalan, but only when they are placed in intervocalic position. That is, while in word-initial position the two glides remain unchanged ([j]*ogurt*, [w]*eb*), in intervocalic position they present two opposite fates: the /w/ shifts into a labiodental fricative (*di*[v]*en* 'they say'), whereas /j/ weakens to a slightly more centralized and open glide (*fe*[e̞]*a* 'I did'), which may even undergo complete deletion in some

varieties (*fe*[Ø]*a*). In order to account for these opposite outcomes, we resort to allomorphy and to the distinction between [+high] and [–high] glides ([j] and [w] are [+high], whereas [e̞] and [o̞] are [–high]). Word-initially, the ranking of IDENT-GLIDE above *M1/GLIDE$_{[+HI]}$ makes impossible the selection of candidates with strengthening strategies for both glides ([w]*eb*, [j]*ogurt*). In intervocalic position, the situation is more complex, and requires the addition of constraints referred to the surrounding environment. On these grounds, the weakening of intervocalic /j/ is explained by ranking the contextual constraint *VGL$_{[+HI], M1}$V ('Do not have a [+high] glide as an intervocalic M1') and ONSET above *M1/GLIDE$_{[–HI]}$ and *VGL$_{[–HI], M1}$V; as a result of this ranking, only the most sonorous palatal glide (*fe*[e̞]*a*) is allowed intervocalically (if ONSET is demoted in the ranking, the candidate with deletion, i.e. *fe*[Ø]*a*, can be chosen instead). The ranking established for the palatal glide has undesirable consequences for the labiovelar glide in intervocalic position, since a parallel form with a [–high] glide (e.g., *di*[o̞]*en*]) or with deletion (*di*[Ø]*en*) would enter the competition and be erroneously selected as optimal, instead of the grammatical strengthened candidate (*di*[v]*en*). To deal with this issue, we assume that the underlying representation of forms showing the alternation [w] ~ [v] (as *di*[w] ~ *di*[v]*en*) displays two allomorphs, one with the labiovelar glide and the other with the labiodental fricative. Moreover, we presume that the two allomorphs appear with the lexical precedence 'fricative>glide', as in {/div/>/diw/} for the root of *diuen* (on lexically ordered allomorphs, see Bonet *et al.* 2007 and Mascaró 2007). There are some empirical arguments that advocate for this allomorphic approach. Among others, the strengthening of the labiovelar glide in intervocalic position is a dubiously productive process, since loans or learned words such as *Hawaii*, *Power* or *PowerPoint* are realized with [w]. Moreover, such strengthening is not common in word-initial position, where it would be even more justifiable ([w]*eb*) because the target segment is not preceded by a vowel.

In sum, in our account of the data we demonstrate that glide phonotactics require, in addition to the reference to independent syllables that Baertsch's (2002) split margin hierarchy provides, the consideration of segmental strings so as to incorporate the effects of the surrounding context into the analysis. Additionally, the analysis we present illustrates how the OT model is capable of deriving the whole typology of outcomes from the same constraint set, although enriched multi-input representations are sometimes needed.

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