Patterns of vowel assimilation and dissimilation in diphthongs and triphthongs in the Romance languages. Articulatory and perceptual motivation

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Based on historical data on spontaneous (i.e., context-independent) and conditioned (i.e., context-dependent) diphthongization processes in the Romance languages (Recasens, 2023), the goal of this investigation is to study the patterns of vowel height assimilation and dissimilation triggered by glide(s) in diphthongs and triphthongs derived from stressed vowels and to attempt to interpret those patterns in articulatory and acoustico-perceptual terms. Assimilation data show that mid low vowels change to mid high when preceded by [j] but do not when followed by the palatal glide (e.g., there are instances of [jɛ] > [je] but not of [ɛj] > [ej]), and a similar scenario holds for diphthongs and triphthongs with the labiovelar glide [w]. These V-to-C assimilatory trends appear to match experimental data showing that (alveolo)palatal consonants exert more prominent carryover effects on vowels than consonants of other places of articulation. Dissimilatory data, on the other hand, reveal the existence of high and mid high vowel lowering effects triggered by both glides [j] and [w] at the regressive rather than the progressive level (e.g., there are instances of [ij] > [ej] and [ej] > [ɛj] but not of [ji] > [je] and [je] > [jɛ]), which suggests that dissimilatory changes occur whenever the vowel articulation is not heavily constrained by the preceding consonant. Assuming that dissimilatory processes are perceptually motivated, i.e., they are ruled by the need to differentiate two similar phonetic segments which co-occur in the same word (Ohala, 1992), the latter finding implies that perception follows production. Other findings on sound changes which have taken place in the Romance languages will be addressed if time permits: (a) postvocalic (alveolo)palatal consonants are more likely to trigger stressed mid high vowel raising when the vowel is /o/ (/o/ > [u]) than when it is /e/ (/e/ > [i]); (b) /a/ raises to a mid front vowel before syllable-final [j] rather than before syllable-initial (alveolo)palatal consonants; (c) on/off-gliding is a prerequisite for the consonant-induced formation of rising diphthongs and the chances that on/off-gliding occurs are determined by the duration and the frequency extent of the vowel formant transitions.

Ohala, J. J. (1992) What's cognitive, what's not, in sound change. In G. Kellermann & M. D. Morrissey (eds.), *Diachrony within synchrony: Language history and cognition*, 309–255. Frankfurt: Peter Lang Verlag.

Recasens, D. (2023) *Consonant-induced sound changes in stressed vowels in Romance*. Beihefte zur Zeitschrift für romanische Philologie, Band 477. Walter de Gruyter.