Onglides in Italian

The syllabification of glides is a topic of considerable controversy in the phonological literature, cf. Davis & Hammond (1995) on American English; Booij (1989) and Visser (1997) on Frisian; LaCharité and Paradis (2000) on French loanwords borrowed into Kinyarwanda. Onglides in rising diphthongs can be syllabified into the syllable nucleus or as part of the onset. Two analyses pertaining to onglides in Italian partially contradict each other: Marotta (1988) and Sluyters (1992). Marotta advocates a nucleus analysis only in the case of [w] belonging to [wɔ], the alleged only true rising diphthong in Italian. Sluyters, on the other hand, proposes a nucleus analysis for [j] and [w] in [je] and [wɔ], respectively, and argues that the onglides of all the other rising diphthongs (such as [ja], [wa] etc.) are syllabified into the syllable onset. In order to re-examine both theories, a production experiment was carried out under laboratory conditions at the Scuola Normale Superiore in Pisa, Italy.

The results of this experiment prove that stressed monophthongs and rising diphthongs in Italian are longer than corresponding unstressed monophthongs and diphthongs. Crucially, the duration of the two onglides [j] and [w] is also affected by stress. For example, stressed [ja] in rich[ja]mano ‘they call back’ is on average 78 ms longer than unstressed [ja] in rich[ja]máva ‘(s)he was calling back’; the glide [j] in the first word is on average 18 ms longer than the one in the second word. In rising diphthongs, the lengthening degree of the glide interacts with the lengthening degree of the following vowel in that the glide-to-vowel ratio is virtually kept constant (1:3 for [jV] and 1:2 for [wV] on average). Besides, the relative durations (in percentage of word duration) of diphthongs are similar to those of plain vowels. Therefore, the experiment provides strong phonetic evidence for the syllabification of all onglides as part of the syllable nucleus (contra Marotta and Sluyters).

The new insights concerning the syllabification of Italian onglides are then captured in terms of Optimality Theory (OT). In my approach, rising diphthongs correspond to underlying sequences of unstressed high vowels [i] and [u] followed by another vowel. The correct syllabification of these underlying vowel sequences is predictable and follows directly from the interaction of metrical/prosodic constraints, constraints on syllable structure and faithfulness constraints. It is therefore not necessary to assume an underlying vowel/glide contrast.

The proposed analysis demonstrates that, within the framework of OT, particular segments – in this case the Italian glides [j, w] – can be assumed to occur only in order to achieve markedness improvement – here hiatus resolution. Apparently, opaque vowel-glide alternations as in inv[i]o ‘I send’ ~ inv[j]ámo ‘we send’ vs. cám[b][j]o ‘I change’ ~ camb[j]ámo ‘we change’ are accounted for by assuming local conjunction of two faithfulness constraints: IDENT(stress) and IDENT(vocalic).

References:


