

Crossdialectal evidence of historical vowel change in Majorcan Catalan

Traditional accounts of Majorcan Catalan report considerable variation of vowel production across dialects. In an early description of Catalan dialects, Alcover (1908) reported front and back realizations of stressed /ə/ in different areas of Majorca. Similarly, Montoya (1995) reported rounded realizations of stressed schwa in areas of Northern and central Majorca. More recently, experimental studies have examined vowel variation in Majorcan Catalan from a more empirical perspective and have provided acoustic and articulatory data that corroborate previous impressionistic findings of dialectologists and sociolinguists. In their description of four major Catalan dialects, Recasens and Espinosa (2007) refer to the low realizations of /ə/ as well as the fronting of /a/ in palatal contexts. In an earlier study we explored vowel variability across two major local dialects in Mallorca: Palma and Manacor. F1 and F2 measurements revealed clear crossdialectal differences between these varieties: Manacor exhibited a more expanded vowel space relative to Palma, the latter with more centralized vowels. Further, we suggested that the front realization of /a/ might eventually cause a merger with neighboring /ɛ/. The study hypothesized that these observations can be interpreted in a holistic way as an instance of historical vowel shift, possibly triggered by the existence of an 'anomalous' vowel, that is, the stressed schwa (a mid central vowel historically derived from /e/).

The present study is an extension of the earlier one in that it provides data from two additional local dialects, Inca and Sóller. The seven stressed vowels /i e ɛ a ə ɔ o u/ were produced in four different contexts (labial, dental, palatal and velar) in real words embedded in a carrier phrase. Eight male speakers (four for each dialect) participated in the experiments. Each speaker elicited six repetitions of each word, randomly presented as visual prompts in six separate blocks. A total of 1536 speech samples (8 vowels x 4 contexts x 6 repetitions x 8 speakers) were recorded and analyzed with Praat. F1 and F2 frequencies were automatically measured at vowel midpoint. The mean formant values obtained for the two dialects reveal that the vowel systems of Inca and Sóller show a trend towards more retracted positions in the vowel space relative to Palma and Manacor. More importantly, this shift affects the location of stressed schwa in the vowel space, which exhibits a move from higher and more centralized realizations in Palma and Manacor to a near-merger with /o/ and /ɔ/ in the Inca and Sóller varieties.

In spite of the differences observed across varieties, the data obtained support the hypothesis that the changes in the overall vowel system of Majorcan Catalan are best interpreted as a case of vowel shift. It is believed that the presence of the stressed mid central vowel (traditionally referred to as 'stressed schwa') may have triggered a reorganization of the vowel space, causing, among other phenomena, a move towards a lower realization of /ɔ/ and a fronted realization of /a/, which in turn would explain the tendency for this vowel to merge with /ɛ/ in some of the varieties under study.

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