

## **The realization of post-tonic -a in the Occitan of the Azun Valley: influence of the degree of prominence of the previous stress**

The Azun Valley belongs to the Lavedan region, in western Bigorre, in the Hautes-Pyrénées in France. It is located between Argelès-Gazost and the Col du Soulor, which communicates with the municipalities of Arbéost and Ferrières in high Valley of Ouzoum, and then with the adjacent Ossau Valley in Bearn. It includes the municipalities of Arrens-Marsous, Aucun, Gaillagos, Arcizans-Dessus, Bun and Arras.

In Occitan, the pronunciation of -a in post-tonic position is subject to diatopic variation (Gilliéron & Edmond 1901-1910; Ronjat 1930: 206-218). The majority realization is a velarized [ɔ] or [o] – or even closed punctually to [u] in some localities (Viaut & Burov 2011) –. However, centralized realizations [ə], sometimes rounded to [œ], are also found, especially in Western Gascon (Allières 1976: 51-52). Finally, a few Occitan varieties, such as those from around Nice, Montpellier or the Aran Valley, for instance, maintain – or have restored – the Latin pronunciation [a].

The accentual phrase (AP) is a prosodic unit that includes a lexical head and all the function words that depend on it, as well as prenominal adjectives and auxiliaries (Beckman & Pierrehumbert 1986; Jun & Fougeron 2000; Post 2000). Only AP-final stress is necessarily realized with a certain prominence, marked by a tonal movement, a lengthening of the syllabic rhyme and an increase in intensity. Even though they present the variety of vocalic phonemes typical of stressed syllables in Occitan, AP-internal stressed syllables are usually less prominent, or sometimes even acoustically undistinguishable from unstressed syllables (Sichel-Bazin 2015: 343-389).

In the Pyrenean Gascon variety from the Azun Valley, the phonetic realization of post-tonic -a oscillates between [a], [ə], and [ɔ]. Our first observations lead us to formulate the hypothesis that [ɔ] would mostly be found in AP-final position, whereas the pronunciation would be closer to [a] AP-internally.

In order to test this hypothesis, a dozen native speakers from the Azun Valley were recorded. They were asked to translate into Occitan French sentences that were designed to exhibit post-tonic -a in different positions within the AP. We intend to measure the frequency of the formants in the middle of each post-tonic -a, as well as the variation in fundamental frequency, length and intensity in the immediately preceding stressed syllable. A statistical analysis of these acoustic values will allow us to determine whether the position in the AP and/or the relative prominence of the preceding stress have a significant influence on the post-tonic vowel's timbre. If this happens to be the case, beyond explaining the variation in the realization of the post-tonic /a/ phoneme in this Pyrenean variety, this will bring an element more to confirm the relevance of the AP in Occitan phonology.

## Literature

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