

Mid-vowel alternation in Coratino.
An analysis based on Element Theory

Coratino is an southern Italian dialect spoken in the Apulia region, a variety exhibiting a vowel reduction process. All unstressed vowels (/i, e, ε, u, o, ə/) are reduced to schwa in unstressed syllables - apart from /a/ (D'Introno & Weston 1997, Bucci 2013). In this dialect, stress is not predictable in isolated. In complex forms, however, stress is always on the suffix. Hence, alternations may be observed in roots between stressed vowels (isolation) and their unstressed correspondent (= schwa, in complex forms). Some cases are shown in 1.

Interestingly, however, the reduction of unstressed vowels does not occur when they are adjacent to a consonant with which they share a melodic feature, like palatality for front vowels and velarity/backness or labiality in the case of back vowels (cf. 2). The reason why unstressed vowels are maintained when they are adjacent to a consonant with which they have some melody in common, is that a melodic prime is shared between the two segments (D'Introno & Weston 1997, Bucci 2013). Honeybone (2005) shows that in many languages, branching structures resist lenition. Thus we may assume that in Coratino, a vowel which shares a melodic prime with an adjacent consonant is a branching structure. Branching allows vowels to resist reduction. We can see in (2) that stressed /ε, ə/ are realized [e, o] in unstressed position and that stressed /ə/ surfaced as [u] in the same context, when it is adjacent to a velar consonant (cf. 3). It is shown in (3a-b) that mid vowels ATRness varies because /ε, ə/ are realized [e, o] in unstressed position. As far as (3c) is concerned, it is not ATRness that is involved, but rather the vowel aperture. Indeed, in unstressed position the vowels /ə, o/ are realized as [u] whenever they are adjacent to a velar consonant. This phenomenon is not surprising because is attested in Standard Italian (Krämer 2009:100). To account for the vowel alternations discussed above, I propose an analysis based on a unary framework designed by Backley (2011). Backley (2011) develops the Element Theory, which is a version of the unary approach designed by Government Phonology (Harris & Lindsey 1995, Kaye et al. 1985). In his handbook, Backley (2011) provides a thorough description for each consonant and vowel segment. Indeed, in Kaye et al. (1985), the issue of the internal structure of consonants is not addressed, while in Harris (1994) and Harris & Lindsey (1995), only a few consonant are described. Backley's internal structures that is explicite for the Apuglia dialects system. I will show that the idea pursued is based on the idea that the sharing of a melodic prime between a consonant and a vowel is in reality the eviction of the vowel's prime by the consonant prime. Thus, in such a structure, where a consonantal prime is also interpreted on a nucleus, the nucleus may interpret another element only if the element with which it shares a prime (an onset) is a head (cf. 4). Structures under (4a) are well formed while (4b) is ill-formed.

The idea that only the head elements can be shared is based on the asymmetry induced by Backley's system between the segments where U is head (mid vowels + ATR, labial consonants) and those where it is not (mid vowels - ATR, velar consonants). This constraint is known in Government Phonology as a "Licensing Constraint" (Charette & Göksel 1994, 1996, Kaye 2001 and Scheer 2010). Licensing Constraints were designed to explain restrictions on combinatorial properties between segments. Indeed, no language produces the full range of possible elements combinations. On the one hand, Licensing Constraints define the particular choice that a language makes regarding combinatorial possibilities, and the other hand they take part in defining the phonological processes attested in the language.

This paper will show that this principle and only this principle is capable of accounting for the mid vowels alternations.

