

A minimal framework for Maltese vowel assimilation and vowel harmony

Van der Hulst (2012) developed a ‘minimal’ model of phonological representations in the sense that this model uses a set of just two monovalent elements for tonality and two elements for aperture. Vowel assimilation (VA) and vowel harmony (VH) are accounted for in terms of a licensing relation between elements. In Maltese, VA applies within the stem-domain, which encompasses the prefixed augment of imperfective for verbs in measure 1; it is a local procedure, which licences a tonality or aperture element on its tier for an adjacent unspecified stem vowel. VH applies to suffixes; target vowels are required to agree in tonality with the ‘closest’ relevant source. In Standard Maltese, the target vowel must be word-final; the ‘closest’ and only source is the left-adjacent nucleus, whichever its status is. In rural dialects, the targets may be word-internal or word-final; the ‘closest’ source is the stem vocalism. A stem nucleus is relevant even if it is moraless and therefore not realized as a phonetic segment.

According to Nevins, the *Harmonize* operation is analogous to the *Agree* operation in syntax. A Search-and-Copy algorithm computes closeness over dominance in the latter case and over precedence in the former. VH is a search initiated by target vowels that are required to agree with a commanding source for an element, e.g. tonality, copied from the ‘closest’ source onto target(s). Cross-dialectal variation is controlled by different *parameters*: vowel (un)specification, (internal or word-final) syllabic position, relative closeness.

As stated by Nevins (2010, 193), framing vowel harmony in the context of the mechanism of *Agree* “increases the prospects for syntacticians and cognitive scientists more generally to view subsegmental dependencies and phrase-structural dependencies as manifestations of the same cognitive architecture”.

References

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