Irregular open syllable diphthongization in Old Tuscan: Its nature and causes

Stefano Canalis – University of Padua

Introduction. This paper discusses exceptions to the diphthongization of /ɛ, ə/ in Old Tuscan, aiming to show that they were not caused by non-phonetic factors like analogy or contact; rather, diphthongization was only conditioned by phonetic factors – as stress position, or the type of following segment – which affected an allophonic process of vowel lengthening, but the outcome of this conditioning was subject to a probabilistic and only partial phonological recategorization.

Facts. In Tuscan (as in most Romance languages) /ɛ, ə/ were diphthongized, yielding [je, wo] respectively. While in other Romance languages diphthongization occurred in open and closed syllables alike (e.g. Spanish puerta ‘door’ < Latin portam, but Italian porta), in Tuscan it was restricted to open syllables (e.g. Pêdem > piede [ˈpjɛːde] ‘foot’, fòcum > fuoco [ˈfwoːko] ‘fire’). However, this process is known to have a fair number of exceptions in Tuscan, as several words preserve [ɛ] or [ɔ] in open syllables (e.g. nove [ˈnɔːve] ‘nine’, pecora [ˈpeːkora] ‘sheep’). Furthermore, not only diphthongization failed to apply in some lexical units, but several other words display both forms in medieval texts (e.g. niego and nego ‘I deny’, piede and pede ‘foot’, luogo and logo ‘place’). Some of the exceptions (especially in verbal paradigms) can be fairly straightforwardly accounted for as instances of morphological analogy, but in several other cases this explanation is not satisfactory (for example nove has no diphthongization, yet it is an uninflected word). Moreover, one of the apparent relevant factors is indisputably phonological: it has long been noticed that there are more exceptions to diphthongization in proparoxytones than in paroxytones.

Previous hypotheses. Diphthongization in Tuscan (and more generally in Romance) has been extensively debated since the 19th century. According to one hypothesis, Tuscan diphthongs are of metaphonic origin (e.g. Schuchardt 1885, Schür 1972) : /ɛ, ə/ would have been raised to [je, wo] by word-final [i], [o] < u. Later on, the diphthongs would have been analogically extended to other paradigmatic forms without word-final [i, o], and even to words without any word-final [i, o] in their paradigm; according to a different hypothesis (Rohlfs 1966) Tuscan diphthongs are due to the influence of northern Italian dialects. A third hypothesis (most notably maintained by Arrigo Castellani, e.g. Castellani 1961, 1965) explains Tuscan diphthongization as a result of vowel lengthening in stressed open syllables (supposedly because the longer the vowel, the more it is difficult for speakers to maintain constant sonority and/or position along its overall duration, see e.g. Sánchez Miret 1998). It is useful to note that the issue of regularity (or lack thereof) is crucial for the empirical predictions of the competing hypotheses: contact and analogical change typically admit exceptions, whereas a sound change is usually expected to be regular.

Data and method. Examining a list of Tuscan words obtained from the Tuscan texts in the online corpus OVI (Opera del Vocabolario Italiano) I found confirmation that /ɛ, ə/ in proparoxytones were much less frequently diphthongized than in paroxytones (fig. 1); I also discovered that other phonological factors affect (at a statistically significant level, using a generalized linear model) the likelihood of having a diphthongized outcome, although less intensely than stress position: they include the presence of a complex onset before the stressed vowel, the overall number of syllables in the word, the presence of a liquid consonant after the stressed vowel. Interestingly, all these factors are also known to influence to a greater or lesser degree vowel duration cross-linguistically, and many of them condition the allophonic vowel lengthening in stressed open syllables attested in modern Italian (see e.g. the findings in Fava & Magno Caldognetto 1976, Marotta 1985, D’Imperio & Rosenthal 1999, McCrary 2003, van der Veer 2006).

Conclusions. Tuscan diphthongization is not a regular sound change, but its conditioning factors were purely phonological; furthermore, it plausibly stems from a a regular allophonic process – i.e., lengthening in stressed open syllables. It thus seems that irregularity in the diphthongization process apparently lied in the re-categorization phase (from lengthened vowels to glide-vowel sequences), rather than in the phonetic emergence of vowel breaking. This finding suggests a two-stage model of sound change (similar to the ones proposed by Durie 1996, Hualde et al. 2011) in which at least the first stage is wholly regular, but changes in lexical representation may be non-systematic.
Fig. 1

References


