

Stress-targeted vowel harmony: A diachronic and theoretical account of Occitan ‘metaphonic’ diphthongization

In Occitan, the Latin stressed mid vowels Ē/Ō (= /ε o/) are subject to a diphthongization before palatal consonants, suggesting a stressed vowel harmony/metaphony that targets the stressed syllable¹:

e.g. in [ˈnwejt] < lat. NŌC.TE [see THESOC s.v.], the Latin /k/ in weak coda position (_C) vocalizes as [j] (or C.T becomes an affricate [tʃ] [ˈnwejtʃ] through glidification of /k/ which palatalizes T). This Occitan ‘metaphonic’/ stress-targeted pattern shows some particular properties of theoretical interest for phonology. The palatal element [j] =/j/ is considered the ‘metaphonic’ trigger/licensor for the diphthongization. However, the glide element (instead of a final atonic high vowel) is not the typical trigger generally found in Romance metaphony. Yet, in this process the diphthongs {wε ʏε (w)ɔ ʏɔ} are likewise Romance diphthongs.

There seems to be a micro-variation in the ‘metaphonic’ systems across Occitan varieties: in the Occitan space, different variants of the diphthong {wε ʏε (w)ɔ ʏɔ} and palatalized consonant ([j tʃ]) are found [ˈnʁetʃ / ˈnɔtʃ / ˈnwejt... (Olivieri & Sauzet 2016), even if [ʏε ʏɔ] seem to be the majority².

Our diachronic analysis of Occitan diphthongization is based on two medieval textual corpora that can be queried via two electronic databases. The first is called *DocLing* - the electronic edition of France’s oldest linguistic documents, a project which is currently being developed in Zurich: www.rose.uzh.ch/docling (see Glessgen 2015), which encompasses the Occitan texts between the 12th and 15th centuries.

The *DocLing* project was founded in the 19th century by Paul Meyer, who was responsible for the edition of the *Documents linguistiques du Midi de la France* (1909), and by Clovis Brunel (1926/1952) [2 vols., 54, original records - mainly for Languedoc and Rouergue (ca 1100 - ca 1200)], then it was continued by Jacques Monfrin. It is now being continued in electronic format by Martin Glessgen (dir.).

The second database used consists of the electronic edition of the *Petit Thalamus* (<http://thalamus.huma-num.fr/>), which includes Occitan scripts from the 13th to 15th centuries.

The Occitan diphthongs <ue>-like are attested very early in these charters (from *DocLing*):

Chartes – Departement A : Hautes-Alpes, Basses-Alpes, Alpes Maritimes³

- docAlpHpPr [010] <nuech> ‘night’ (6), docAlpM [024] <ben nuech> (140) [043] <dos nuech> (13) <NŌC.TE
- docAlpHpPr [02] <fuec> ‘fire’ (277) and [018] <fuecs> (16), docAlpM [060] <fuech> (1[SG]) <FŌCU
- docAlpHpPr [032] <lioc> ‘place’ (34), docAlpM [037] <luech> (7[PL]) et [038] <luech> (12[SG]) <LŌCU

In this talk we focus on the ‘metaphonic’ diphthongization above, which is not a straightforward outcome of an assimilation process generally found in stress-targeted harmonic patterns (i.e. a scalar raising), as well as on the nature of locality in the trigger-target relation (C-V), and on the segments that are transparent to harmony (palatal and velar) or block it. Our goal is to describe the formal mechanism that drives the Occitan stress-targeted patterns in order to check whether the term of metaphony is justified for the Occitan diachronic diphthongization.

We sketch the licensing phenomena and metaphonic effects of the palatal glide on root-initial tonic vowels in the framework of Government Phonology Element Theory (i.e. unary representations), and we shape the phonological content of active primes involved in this Occitan metaphonic diphthongization pattern.

Through the analysis of charters, as well as through the analysis of medieval writing represented by the *Petit Thalamus*, we also provide a chronological order in the genesis of different spellings and a phonological representation, for <liocs/luec/luech/luoc> or <fuec/fuoc> in order to derive a restricted formal variation within Occitan language.

References

- Marijn van ‘t Veer, Bert Botma, Florian Breit, and Marc van Oostendorp (2023). *The structure and content of phonological primitives*. Oxford: CUP.
- Walker, Rachel. 2011. *Vowel Patterns in Language*. Cambridge: Cambridge University Press.

¹ Ronjat (§ 78, 79, 90, 101, 104-105, 220, 295, 297, 400, 401); Grafström (1958).

² Lieutard s.v. *Diphthongaison conditionnée* online *Petit Thalamus* ms. AA9.

³ See also ŌC(Ū)LU <uech> ‘eye’(docAlpM [025] (36[PL])), MĒDIU <miecg> ‘middle’ (docAlpHpPr [36(56)]), <miech> ‘better’ (docAlpHpPr [015(120)]), MĒLIUS <miejo> (docAlpHpPr [031(7)]), LĒCTU <liech> ‘bed’ (docAlpHp [038(1)] etc.