

## The contrastive scope of $[\pm\text{tense}]$ in Laurentian French

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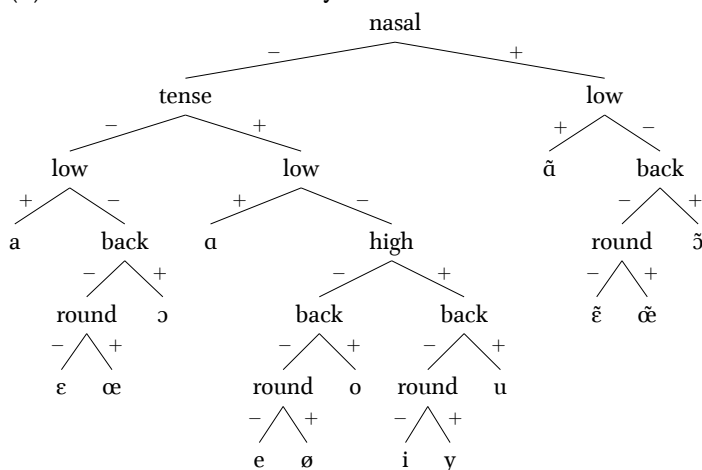
The Activity Principle (Dresher 2015, 2016) holds that features identified as contrastive are those that “are relevant to the phonological computation.” In its strongest interpretation, this principle predicts that redundant features are unable to spread, to block spreading, or to condition the application of phonological processes. Laxing harmony in Laurentian French (Walker 1984; Poliquin 2006) presents an apparent challenge to the strong Activity Principle. High vowels /i y u/ are predictably lax  $[\text{I Y U}]$  in final syllables closed by any consonant other than the voiced fricatives /v z ʒ ʁ/. Although this laxing is predictable, a lax high vowel in the final syllable triggers harmonic laxing of high vowels earlier in the word, as in (1). Poliquin (2006: 97)

- (1) Laxing harmony (Poliquin 2006: 7)
- a. *minute* [mi.nyʁt] ‘minute’
  - b. *pourrite* [pø.ʁit] ‘rotten’ (f.)
  - c. *stupide* [stsy.pid] ‘stupid’ (f.)

also describes optional dissimilatory laxing in disyllabic words with two underlyingly identical high vowels in open syllables: e.g., *midi* is optionally [mi.dzi] instead of [mi.dzi]. As there is no underlying contrast between tense and lax high vowels, propagation of laxness from one high vowel to another seems to defy the Activity Principle, and dissimilatory laxing shows that the relevant feature is active even when high vowels are the only segments involved—it cannot come from the coda consonant.

The answer, I propose, lies in the contrastive scope of  $[\pm\text{tense}]$ . Although high /i y u/ do not have phonemic high lax counterparts, the tense–lax distinction is contrastive in the wider system: mid /e ø o/ contrast (marginally) with /ε œ ɔ/; Jakobson and Lotz (1949) take the contrast between /a/ and /ɑ/ to involve the same feature. If  $[\pm\text{tense}]$  has wider scope than  $[\pm\text{high}]$  in the contrastive hierarchy, as in (2), it will be contrastively specified on /i y u/ as the feature that distinguishes them (and /ɑ e ø o/)

(2) Contrastive hierarchy for French vowels



from /a ε œ ɔ/. Because  $[\text{+high}]$  is also specified on /i y u/ (distinguishing them from /e ø o/), laxing does not make /i y u/ featurally identical to any underlying lax vowel; rather, it produces a combination of contrastive feature values  $[\text{+high}, \text{–tense}]$  not present in the underlying inventory.  $[\text{–tense}]$  can then propagate from a high vowel in a final closed syllable to other high vowels as per Poliquin.

The tree in (2) combines and builds on proposals by Jakobson and Lotz (1949), Burstynsky (1968), and St-Amand (2012), and finds independent support in their analyses of other phenomena. St-Amand gives wide scope to the tense–lax contrast as part of an account of coalescence in hiatus resolution. However, (2) uses binary features, while St-Amand uses privative ones. The laxing facts imply binary  $[\pm\text{tense}]$ : if the relevant feature were privative TENSE, then closed-syllable laxing would delink TENSE, and harmony would have to copy the *absence* of a feature. If the marked value were LAX, it would be absent on high vowels underlyingly, which would make it hard to motivate dissimilatory laxing as an OCP effect, and harmony would have to spread an inserted feature. St-Amand’s case for privative features rests on the assumption that there is no tense–lax contrast in the low vowels. She argues that under either hierarchical ordering of  $[\pm\text{ATR}]$  and  $[\pm\text{low}]$ , coalescence of /ae/ to [ε] would introduce a feature not present on either of the input vowels: either  $[\text{–ATR}]$  would be unspecified on /a/, or  $[\text{–low}]$  would be unspecified on /e/. Analyzing the /a/–/ɑ/ contrast as one of tenseness (following Jakobson and Lotz 1949) removes this problem (/a/ is  $[\text{–tense}]$  in (2)), and accounts for parallels in the distributional patterns of /a/–/ɑ/ and /ε œ ɔ/–/e ø o/.

## References

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