

An Argument for Quantity-Sensitive Foot Structure in Québécois: Evidence from High Vowel Alternation

The traditional view of the prosody of French, a syllable-timed language with fixed phrase-final stress, attributes very low functionality to the prosodic units of mora and foot. To the extent that the foot can be of relevance, it is viewed to be redundant in that it is co-extensive with the syllable (cf Selkirk 1978). Following this premise, this paper proposes quantity-sensitive foot structure for Québécois French in order to uniformly account for the tense-lax-0 alternation of high vowels in non-final open syllables.

In Québécois, lax high vowels are excluded from final open syllables, while non-finally, are generally analyzed to result from harmonic assimilation, with the lax high vowel in the final closed syllable serving as the trigger (Dumas 1976, Walker 1984, Poliquin 2006):

(1) Laxness via harmony (Poliquin 2006):

[stɥpɪd] ~ [stɥpɪd]	stupide	‘stupid’
[minɥt] ~ [minɥt]	minute	‘minute’
[kutɥm] ~ [kutɥm]	coûtume	‘custom’

The current analysis, however, focuses on the optional presence of lax high vowels in forms where no laxness trigger can be found, including in morphologically related forms, thus precluding a harmonic account. These forms are exemplified in (2):

(2) Tense/lax alternation in non-final open syllable (non-harmonic),

(Walker 1984, Déchaine 1991):

[a.mi.tje] ~ [a.mi.tje]	amitié	‘friendship’
[ny.me.ro] ~ [ny.me.ro]	numéro	‘number’
[sa.ly.tɛ:r] ~ [sa.ly.tɛ:r]	salutaire	‘salutory’

In the prosodic account presented in this paper, it is assumed that the canonical foot of Québécois is monosyllabic and, crucially, minimally monomoraic. Following Montreuil (2004b), high vowels in Québécois are analyzed as superlight, SL, that is, their inherent, sonority-based weight is less than a full mora μ (designated here as λ). On the surface, however, high vowels can be associated to μ , which corresponds to the tense phonetic variant.

In polysyllabic forms, as in (2), the final foot is obligatorily monosyllabic. A non-final syllable with a superlight rime can combine with an adjacent syllable to create a disyllabic foot. This allows the high vowel to preserve its inherent superlight weight and surface as lax:

(3) Branching trochee in tri-syllabic words: lax realization

(ny _λ .me _μ)(ro _μ)	(SL L)
(a _μ .mi _λ)(tje _μ)	(L SL)

The possible foot configurations are evaluated on the basis of the Foot Well-Formedness Hierarchy proposed here for Québécois, in which quantitatively even feet are preferred to quantitatively uneven feet. The hierarchy is partially reproduced below:

(4) Trochaic Markedness Hierarchy: (L), (H), (L L) >> (L SL), (SL L)

The fact that (L L) is preferred to (L SL) and (SL L), per quantitative evenness, accounts for the existence and the dominance of the realizations of the forms in (3) with a tense variant.

(5) Branching trochee in tri-syllabic words: tense realization

(n_νλ .me_μ)(ro_μ) (L L)

(a_μ .mi_μ)(tje_μ) (L L)

Furthermore, the Hierarchy predicts that a form prosodically compliant with (H) is a better-formed constituent than a quantitatively uneven (L SL) or (SL L). In the current analysis, this accounts for what is viewed here as H-induced deletion (provided that a number of phonotactic conditions are met):

(6) (H)-induced deletion: ka.mi.zɔl ~ kam.zɔl (Déchaine 1991)

(ka_μm_μ)(zɔl) (H)

The foot-based analysis is further extended to account for analogous disyllabic forms via degenerate feet (SL). The Optimality-theoretic analysis of variable realization of high vowels in non-final open syllables is accounted for via the mechanism of Floating Constraints (Nagy, Reynolds 1997).

REFERENCES

- Déchaine, Rose-Marie. 1991. "Stress in Québécois: evidence from high vowels." Papers from the Regional Meetings, Chicago Linguistic Society, 27, 107-118
- Dumas, Denis. 1976. "Québec French High Vowel Harmony: The Progression of a Phonological Rule." Chicago Linguistic Society, 12, 161-168
- Montreuil, Jean-Pierre. 2004b. "The Computation of weight in English and in Québec French." First PAC Workshop 23-24 April 2004, Université de Toulouse le Mirail
- Nagy, Naomi and Bill Reynolds. 1997. "Accounting for variable word-final deletion within Optimality Theory." In *Language Variation in Phonological Theory*, F. Hinskens, R. van Hout and L. Wetzels, eds. Benjamins: Amsterdam
- Poliquin, Gabriel. 2006. "Canadian French Vowel Harmony." Ph.D. Dissertation. Harvard University
- Selkirk, Elizabeth. 1978. "The French foot: on the status of "mute" e." *Studies in French Linguistics* 1, 141-150
- Walker, Douglas. 1984. *The Pronunciation of Canadian French*. Ottawa: University of Ottawa Press