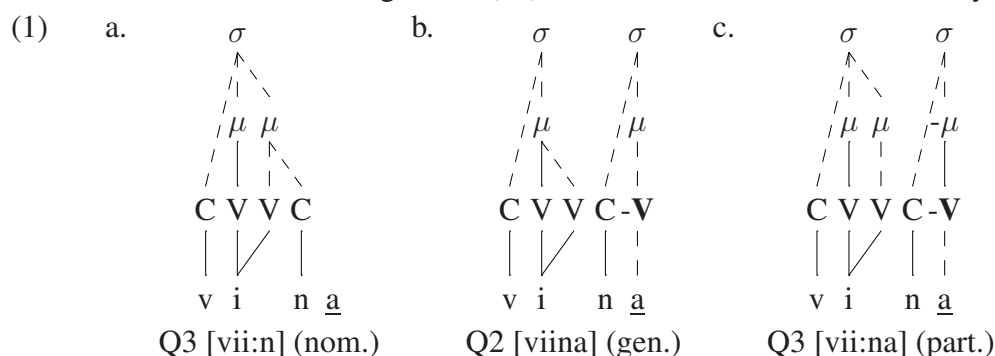
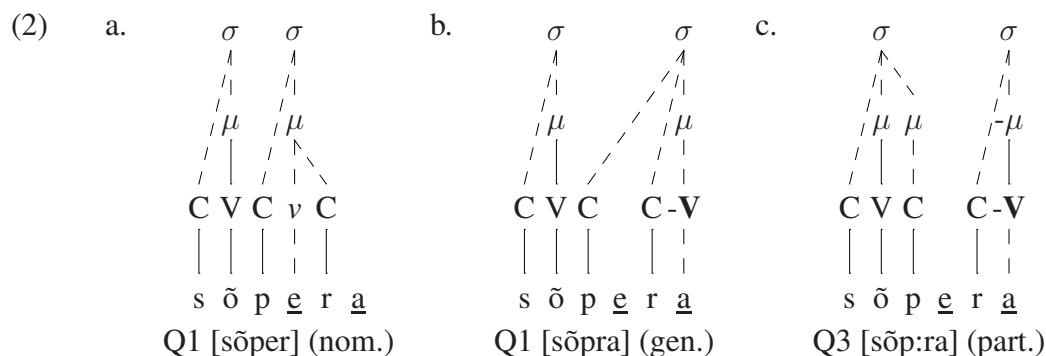


Prosodic epenthesis and floating vowels in Estonian quantity

Estonian famously possesses a three-way quantity distinction: Q1 (short; CV), Q2 (long; monomoraic complex rhyme), and Q3 (overlong; bimoraic complex rhyme). Much generative work has discussed how the three degrees of quantity should be represented (e.g., Prince 1980, several papers in Lehiste and Ross 1997, and Ehala 2003, among many others). However, few authors have provided an explicit account of how the paradigms displaying these contrasts should be derived, often implying morphophonological rules that directly modify prosodic structure or failing to address the issue at all. Starting with the assumption that length and weight are represented independently (in line with Ehala 2003), Spahr (2013) presents an analysis in which case suffixes may consist only of timing units (V-slots) or both timing units and weight units (moras). The underspecified prosodic material can then combine with the (unpredictable) floating vowels on the root, which are not realized in unsuffixed forms. This accounts for many Q2–Q3 minimal pairs, which distinguish bisyllabic genitive and partitive case forms that alternate with Q3 monosyllabic nominative forms; the roots are underlyingly bimoraic, and the floating vowel cannot be realized without any timing units to host it (1a). Bimoraic long syllables are realized as Q3, while monomoraic long syllables are Q2. The partitive suffix has its own mora and V-slot, hosting the floating vowel without altering the bimoraic (Q3) status of the long first syllable (1c), while the genitive has only a V-slot and must borrow a mora from the stem to realize the floating vowel (1b). This leaves a monomoraic first syllable, in Q2:¹



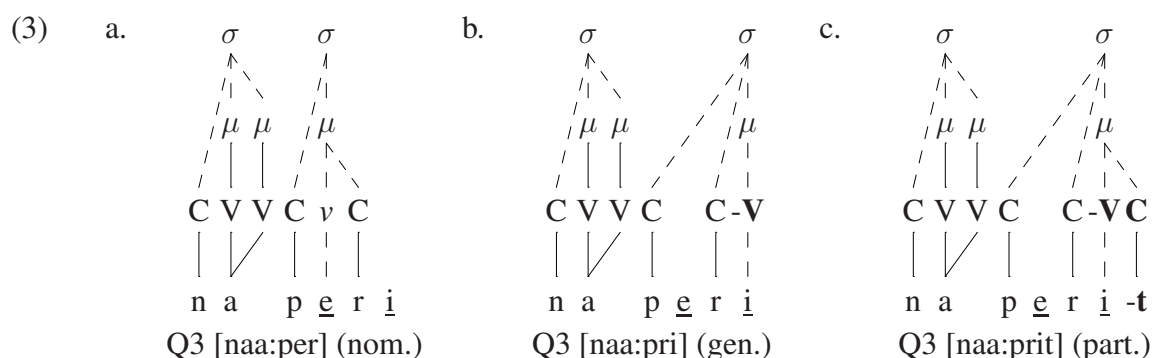
Building on Spahr's proposal, I show that the use of segmentally underspecified case morphemes allows for a succinct analysis of several additional classes of Estonian nominals, if we assume a prosodic tier epenthesis process and that roots may contain multiple floating vowels. In the nominative case (2a), an epenthetic V-slot is inserted in order to realize the floating /e/, because /pr#/ is not a licit coda in Estonian. In (2b) and (2c), the final floating /a/ is realized by prosodic material from the case suffixes, which bleeds epenthesis, leaving the /e/ unrealized. As in (1), a Q1–Q3 alternation exists in the genitive and partitive because the genitive must borrow a mora from the root, while the partitive suffix provides its own mora:



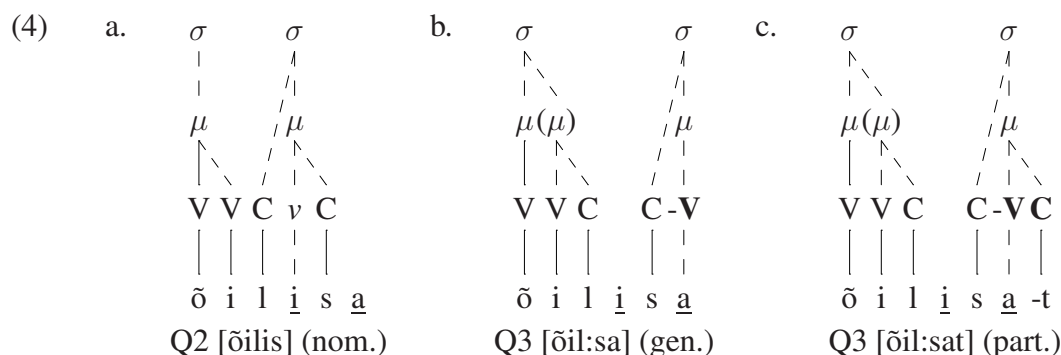
¹In the examples here, underlining represents an underlyingly floating vowel, small *v* represents an epenthetic V-slot, and parenthesized (μ) represents a mora inserted by Weight-By-Position.

Such genitive–partitive alternations are Q1–Q3 rather than Q2–Q3 because /pr/ is a valid for the second syllable, leaving a short light first syllable in the genitive. The mora-bearing /p/ in the partitive (2c) is not syllabified as an onset, however, giving a bimoraic (Q3) syllable.

There is also a class of nouns that shows an overt /-t/ in the partitive case. I propose that this suffix consists of a V and C slot, with the C linked to a /t/, but no underlying mora. This accounts for the differences in quantity alternations seen with this class of nouns. The root in (3) underlyingly contains three moras, such that the first syllable is always bimoraic (Q3). The third mora links to either an epenthetic V-slot in the nominative (3a) or to the V-slot of the genitive (3b) and partitive (3c) suffixes, neither of which cause a quantity alternation:



For underlyingly bimoraic roots of this class, one of the moras must be borrowed to host the epenthetic V-slot in the nominative (4a). For the genitive and partitive, epenthesis is bled as in (2) and (3), but since /ls/ is not a valid onset in Estonian, this leaves a VVC coda in the first syllable, feeding mora-insertion via Weight-By-Position. Because they are now bimoraic, the first syllables of both the genitive (4b) and the partitive (4c) are realized as Q3 rather than Q2:



Allowing floating vowels and units of quantity to be specified separately from each other is advantageous in that it allows for a unified account of several distinct paradigms using the same independently motivated phonological processes. This provides a cleaner analysis of the segmental and quantitative alternations observed in a number of patterns not typically addressed in the generative literature, and it does so without requiring arbitrary morphophonological rules that directly manipulate prosodic structure.

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