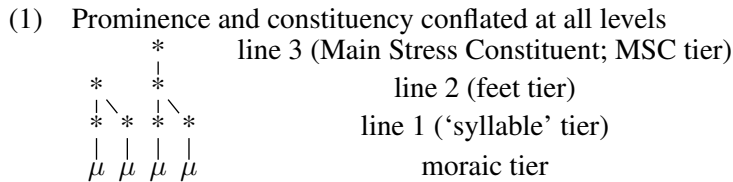
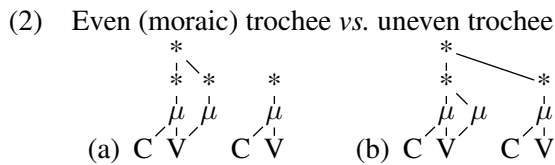


Prominence and Constituency in Munster Irish Stress

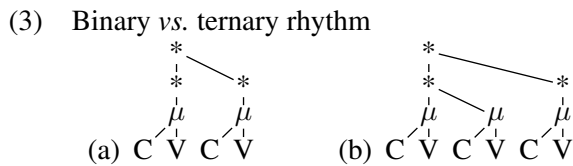
For some metrical phonologists, prominence (*i.e.* grid marks) is located in a different dimension that runs parallel to the dimension in which constituency (*i.e.* feet) is represented (Lieberman and Prince 1977 and more recently Hyde 2012, a.o.). For others, relative prominence and prosodic constituency are conflated (Hammond 1984 and Halle and Vergnaud 1987, a.o.). In this study we propose to extend Hammond’s (1984) model of conflation to the level of the syllable by eliminating the syllable node and give the grid units at line 1 the status of a ‘phonological syllable’, as illustrated in the 3-level arboreal grid in (1). The empirical focus is stress assignment in Munster Irish as described in Doherty (1991), Rowicka (1996), Green (1997) and Gussmann (1997), *cf.* Ó Sé (2008) and Iosad (2013).



This proposal allows us to characterize in a simple way the difference between various foot types. Consider a sequence of two syllables, the first of which contains a long vowel and the second a short vowel. Cross-linguistically, the HL (H=heavy; L=light) string can be parsed into trochees in two different ways, depending on whether each mora projects a grid mark on line 1 or not (2) (see Mellander 2003 for arguments in favor of the uneven trochee).



In (2a) a mora cannot occupy a dependent position at line 1, whereas in (2b) it can (dependent constituents are linked to the upper constituent by a slanted line). Therefore, the relation between the constituent at line 1 ($\approx \sigma$) and the ‘phonetic syllable’ is not one-to-one. Following the same rationale, a sequence of two monomoraic ‘phonetic syllables’ can also be parsed in two different ways, which derives the difference between binary and ternary rhythm (3).



In (3a) a CV syllable (branching mora *à la* Hyman 1985) cannot occupy a dependent position at line 1, whereas in (3b) it can. Again, the constituent at line 1 ($\approx \sigma$) and the ‘phonetic syllable’ are not isomorphic.

To create the prosodic structures represented so far, we make use of the standard family of constraints of the PARSE type specified for the constituents at each prominence tier (PARSE- μ , PARSE-line1 and PARSE-line2). We furthermore propose two families of branchingness constraints (the core of Dresher and van der Hulst 1998), that are crucial in the analysis of Munster Irish stress. These constraints penalize heads that do not branch and dependents that branch. Alignment constraints are also needed.

In Munster Irish main stress is initial in words that contain no H syllable in the first three syllables of the word (morphological structures does not affect the position of stress): 'LL, 'a.səl, ‘donkey’; 'LLL, 'a.lə.gər, ‘loud talk’; 'LLLL, 'a.nə.mə.xəs, ‘name’; *cf.* L'H, kər.'kɑ:n, ‘pot’.

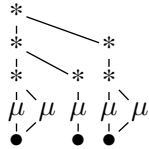
Sequences of a H and a L syllable attract stress to the H syllable; if a H syllable follows, it receives secondary stress (long vowels and diphthongs, but not coda consonants, make a syllable H): 'HL, 'bɔ:.hər 'road'; 'HLL, 'təi.lə.kə, ‘gift’; 'HL,H, 'u:.də.'rɑ:s, ‘authority’. In case of more than one HL sequence, the rightmost attracts primary stress; this is one of the contexts in which main stress is not left-aligned: 'HL'HL, 'fɔ:.gə.'rɔ:.fər, ‘will be announced’. Also, in a sequence of two H syllables in word-initial position, the second H syllable receives primary stress: H'H, di:'vi:n, ‘idle’; H'HL, re:'su:n.tə, ‘reasonable’. Furthermore, if a H syllable is

preceded by a word-initial sequence of two L syllables, primary stress falls on the H syllable and an optional secondary stress falls on the initial syllable: (,)LL'H, (,)mar.kə.'rɛ:r, 'mackerel'.

In what follows, we present an analysis of the data. With respect to alignment, the head foot is left-aligned as long as the MSC is right-aligned. With respect to branchingness, the head foot's head (main stressed 'syllable') must branch, and no immediate dependent can branch.

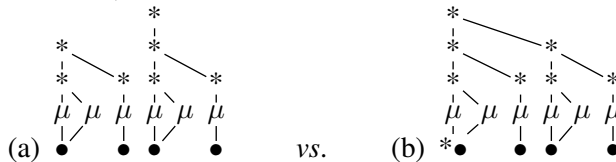
For instance, in HLH forms both alignment and branchingness constraints are satisfied if stress is initial and secondary stress is final (from now on we represent the segmental tier as dots that refer to vocalic nuclei) (4).

(4) HLH → 'HL,H



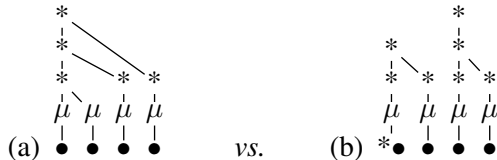
In HLHL forms assigning initial main stress and aligning the MSC with the right edge would introduce a violation of the branchingness constraint prohibiting MSC's dependents to branch. This is why primary stress falls on the second heavy syllable (5). Stress shift is also not initial in HH forms because the branchingness constraint against a branching head foot's dependent must also be satisfied (not represented here).

(5) HLHL → ,HL'HL



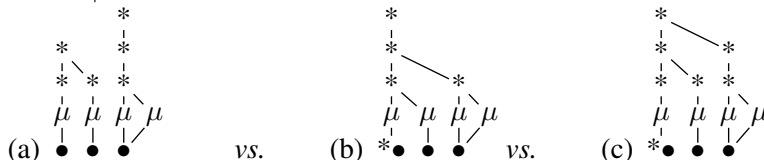
One crucial aspect of the analysis is that the head foot's head (main stressed 'syllable') must branch. In the absence of long vowels in LLLL forms, this branchingness constraint allows for parsing two monomoraic 'phonetic syllables' into the same 'phonological syllable', thus maintaining initial stress and still satisfy both alignment constraints. A one-to-one relation between CV sequences and 'phonological syllables' would wrongly predict penultimate stress (6b).

(6) LLLL → 'LLLL



Finally, in LLH forms, assigning initial stress is blocked by the same branchingness constraint in head foot's dependents. The second ungrammatical candidate in (7) is ruled out because, although it satisfies alignment, the head foot's head (main stressed 'syllable') does not branch.

(7) LLH → ,LL'H



To conclude, this analysis of Munster Irish stress recognizes the fact that a sequence of LL and H syllables behave identically. This fact is a success of our representations, expressed in terms of identical structures at line 1 in an arboreal grid-based model that conflates prominence and constituency at all levels, and is difficult to express by alternatives in which there is a one-to-one relationship between 'phonetic syllables' and 'phonological syllables'.