**Toward a Uniform Moraic Quantity Principle**

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**Introduction.** Cross-linguistic variation in the status of CVC syllables in weight-sensitive primary stress presents difficulties for theories of moraic structure attempting to pin down the moraicity of codas (e.g., CVV > {CVC, CV} vs. CVV > CVC > CV). Despite proposals to account for this inconsistent weight status (Hyman, 1985; Hayes, 1989; Morén, 2000), such accounts make incorrect predictions concerning the moraicity of CVC for other weight-sensitive phenomena, particularly secondary stress (Ryan, 2019, 2020). This paper proposes a novel solution that captures CVC’s flexible weight-status while both maintaining the cross-linguistic moraicity of codas and avoiding the incorrect predictions plaguing the standard variable weight approach.

The data in (1) displays primary and secondary stress in Chickasaw (Gordon, 2004a).

Primary stress is word-final by default, but a CV: attracts primary stress when present. Thus, the primary stress criterion is CV: > {CVC, CV}. Secondary stress, in contrast, falls on all CV: and CVC syllables, skipping over CV. The disparity between the primary and secondary stress scales of Chickasaw is problematic because CVC simultaneously behaves as light (for primary stress) and heavy (for secondary stress). The traditional view of moraic structure treats the moraicity of codas as a language- and context-specific parameter, in which codas sometimes project a mora and other times do not. The data from Chickasaw, however, provides a case in which this variable weight analysis fails to make accurate predictions because two separate weight-sensitive phenomena (primary and secondary stress) treat CVC differently in the same environment.

(1) noˈtakˈfaˈjaw’, okˈfokˈkol ‘type of snail’  hattaˈkat ‘man’  inˈtikˈbaː ‘sibling’  taˈlaːˌnomˌpa ‘man’  telˈəˌnomˌpa ‘telephone’  jimaˈnoːˌli ‘Seminole’

**Proposal.** A theory of Uniform Moraic Quantity (UMQ), contra the standard variable weight approach to weight-sensitive stress, is a principle of UG that requires coda consonants to contribute a mora to the syllable. Thus, the standard assumption that coda moraicity is a language-specific parameterized option is rejected under the approach outlined here since GEN is unable to produce candidates that violate the UMQ. According to the UMQ, then, CVC syllables are universally bimoraic, leading to a straightforward analysis of the secondary stress criterion in Chickasaw: CV: and CVC are bimoraic and heavy, thereby attracting stress, while CV is monomoraic and light. To account for the light status of CVC for primary stress, on the other hand, I propose that Chickasaw primary stress relies on another metric, separate from distinctions in moraic quantity, to determine syllable weight; namely, moraic quality. Moraic quality is defined by the sonority of the segment projecting each mora. Thus, the mora is encoded, not just with quantitative weight from its projecting segment, but with the sonority of that segment as well. Vocalic moras (μV) are the most sonorous and are positioned at the top of the sonority scale in (2), outweighing non-vocalic moras (μR and μD). Sonorant consonant moras (μR) make up the middle tier on the scale. While sonorant consonant moras are less sonorous and thus qualitatively lighter than vocalic moras, they are more sonorous and qualitatively heavier than obstruent consonant moras, which reside at the bottom of the sonority scale and are lighter than both vocalic and sonorant consonant moras (e.g. Zec 1995, 2003, 2007, 2011). Moraic quality constraints exploit these sonority distinctions by choosing a point on the scale in between...
two levels and making a bifurcation. Every mora quality above that bifurcation point is considered heavy, and every mora quality below that bifurcation point is considered light. Rather than using simple differences in mora count to make syllable weight distinctions, the Chickasaw primary stress scale CV: \{CVC, CV\} uses the quality of the moras a syllable contains to classify syllables as heavy or light. The relevant bifurcation point for Chickasaw primary stress is between vocalic and non-vocalic moras, resulting in the following distinctions in moraic quality: \(\mu_V > \mu_R, \mu_O\).

I employ moraic quality constraints within the well-motivated Nonfinality framework outlined in Hyde (2007), originally formulated to make syllable weight distinctions in moraic quantity. Nonfinality constraints contain three arguments: Non-fin (GCat, Cat, PCat). Entries on a specified level of the grid (GCat) must avoid the final instance of a particular element (Cat) within a given domain (PCat). The particular moraic quantity constraint responsible for distinctions in syllable weight for secondary stress in Chickasaw is Non-fin \((x, \mu, \sigma)\), which assigns a violation for every foot-level gridmark that occurs over the final mora of a syllable. As shown in figure 1, CV: and CVC are bimoraic and satisfy the moraic quantity constraint, while CV is monomoraic and violates it.

Non-finality moraic quality constraints constitute a subset of Non-finality constraints in which Cat is always a mora of a specified quality. Since primary stress in Chickasaw prefers to avoid syllables with a short vowel, the moraic quality constraint, Non-fin \((x, \mu, \sigma)\) – which penalizes primary stress falling over the final vocalic mora of a syllable – must outrank a constraint drawing primary stress to the right edge of the word: Non-fin \((x, \mu, \sigma) \gg x_R\). The tableau in (3) demonstrates the efficacy of the UMQ approach in predicting the primary and secondary stress patterns in Chickasaw. Candidate (a) is eliminated because it places primary stress on the word-final CVC instead of pen-initial CV:, thereby violating Non-fin \((x, \mu, \sigma)\). Candidate (b), on the other hand, is ruled out because it applies secondary stress to a CV syllable, violating the moraic quantity constraint, Non-fin \((x_f, \mu, \sigma)\). Thus, candidate (w) emerges as optimal.

(3)

<table>
<thead>
<tr>
<th>/ talaːnompaʔ/</th>
<th>NF((x_0, \mu_V, \sigma))</th>
<th>x_0-R</th>
<th>NF((x_f, \mu, \sigma))</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\rightarrow (w)) tā’lāː nom pəʔ (0)</td>
<td>2 (\rightarrow 0)</td>
<td>(</td>
<td>w</td>
</tr>
<tr>
<td>(a) tā’lāː nom pəʔ (1)</td>
<td>0 (L)</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td>(b) tā’lāː nom pəʔ (0)</td>
<td>2 (1)</td>
<td>(W)</td>
<td></td>
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</tbody>
</table>

The Uniform Moraic Quantity approach to weight-sensitivity simplifies moraic theory by eliminating the variable weight of CVC without sacrificing the ability to capture the vast majority of weight-sensitive stress systems. Positing the uniform bimoracity of CVC is not only advantageous for resolving the conflict between primary and secondary stress in Chickasaw, however. It will be shown that when CVC is light for primary stress, the UMQ accurately predicts the bimoracity of CVC for other weight-sensitive phenomena as well, including word minimality, syllable template restrictions, compensatory lengthening, and tone.