A Prosodic Analysis of Infixation: the case of Southern Paiwan

Southern Paiwan, an Austronesian language of Taiwan, has typically rich affixation [1]. This creates a challenge for primary (word) stress assignment in relation to different morphological structures. Chen (2006) argues that the Prosodic Word (PW) is the domain of primary stress assignment, however, it will be shown that her prosodic analysis fails to adequately account for stress assignment with infixation. In this paper, I propose that the PW is, in fact, the domain of primary stress assignment, but that it must be defined somewhat differently from Chen's definition. In order to account for stress assignment with infixes, moreover, an additional constituent between the PW and Phonological Phrase (PPh), the Composite Group (CompG) [2,3] must also be considered.

Primary word stress is regularly assigned on the penultimate syllable, regardless of vowel quality, or on the final syllable of monosyllabic words [1]. For example, in (1a), stress appears on the penultimate syllable, even though the nucleus is a schwa. Suffixes all participate in stress assignment with the root, as seen in (1b), where the primary stress is assigned to the penult provided by the suffix. (Stress is indicated by an acute accent.)

(1) a. cə́vəs 'sugarcane' (Chen, 2006: 85)
b. vaik-áŋa 'already going' (Chen, 2006: 78)

Although infixes, by definition, are introduced within a root, they do not participate in stress assignment. Thus in (2), primary stress is not assigned on the penultimate schwa syllable contributed by the infix, but rather on the final syllable, as if it were a monosyllabic word.

(2) k-əm-án 'to eat' (Chen, 2006: 79)

Chen proposes that stress is assigned in relation to the PW, which she defines as a root plus its suffixes, and adopting an edge-based approach, she only introduces the left-edge of the PW. She thus assigns stress to the penultimate syllable the items in (3), however, it is not clear how this must be done, since the right edge of the PW is not assigned, and thus is not available for the determination of penultimate stress. Infixation is even more problematic since Chen introduces the left edge of the PW just after the infix, interrupting the root, as in (4), even though the root (plus suffixes) is claimed to be the domain of stress assignment. This structure, moreover, leaves the first part of the root unaccounted for, as it is dislodged and excluded from the PW.

(3) $_{PW}$[vaik-áŋa 'already going' (4) k-əm-$_{PW}$[áts 'to bite' (Chen, 2006: 79)

Adopting Kabak & Vogel's (2001) concept of Prosodic Word Adjoiner (PWA) [4], I propose instead that words with infixes can straightforwardly accounted by considering infixes to be lexically specified as PWAs. Thus, the PW is defined simply as consisting of a root plus any suffixes; PWAs are excluded and attach as sisters to the PW. In this way, both

the left and right edges of the PW can be identified, and thus still allow stress to be assigned to the PW domain, as shown in (5), where the PW is now monosyllabic, and is stressed on its only syllable.

(5) k -əm-$_{PWA}$ [áts]$_{PW}$ 'to bite'

We must now address the question of how the material excluded from the PW (i.e., infix and initial part of root) can be parsed. In a prosodic hierarchy lacking an intermediate constituent between the PW and PPh, the elements in question must be parsed directly in the PPh (i.e., *[k -əm-* $_{PWA}$ *[áts]*$_{PW}$*]*$_{PPh}$). Such a structure is problematic, however, since the PPh is generally assumed to comprise full lexical items, not individual segments (e.g., [k]) and affixes (e.g., *-əm-*) [5]. I thus propose that what is required is a prosodic constituent between the PW and PPh, specifically the CompG, which comprises a PW plus any stray elements excluded from the PW, including individual segments and certain affixes, as in (6).

(6) [k -əm- $_{PWA}$ [áts]$_{PW}$]$_{CompG}$ 'to bite'

While some analyses would treat such structure as a recursive PW' (i.e., *[k -əm-* $_{PWA}$ *[áts]*$_{PW}$*]*$_{PW'}$) [6], this introduces another problem, the fact that two types of PW exhibit different phonological behaviors: one being the domain of primary stress assignment, and the other not [3]. Since different behaviors require different constituents, parsing the elements excluded from the PW into the CompG can, thus, account for this difference.

In sum, the proposed analysis successfully accounts for primary stress assignment in Paiwan since both edges of the PW are present, the right edge serving as the reference point for identifying the penultimate syllable. Moreover, by lexically defining infixes as PWAs, the definition of PW can now account for the exclusion of infixes and the dislodged portion of the root from the process of stress assignment. Finally, by parsing the remaining elements into the CompG instead of PPh, we are able to retain the characterization of the PPh constituent as consisting of one or more words.

References

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