

The Role of Schwa in Paiwan Prosody

This study investigates the possible role of mid-lax vowel /ə/ at word-level and phrase-level prosody in Paiwan. There has been debate in earlier work on the status of the central lax vowel /ə/ in English and other languages. Van Bergem (1994) has argued that the /ə/ in Dutch was best models as a targetless vowel, while Browman & Goldstein (1992) have found that /ə/ is not merely an empty node but may represent a neutral tongue position or an overall average of the vowel inventory. However, the interaction between /ə/ and prosody has been relatively ignored, though /ə/ exists in many Austronesian languages. Wolff (1993) argues that in Proto-Austronesian (PAN) the stress patterns fell on the penult of the root if it was long (or accented) and on the final syllable of the root if the penult was short (or unaccented). Nevertheless, no further description of the interaction between vowel quality and stress patterns was found in his study. In fact, vowel length is a phonetic realization or a correlate of stress, rather than a prerequisite to trigger stress. Zorc (1993) proposes that PAN *ə influences accent in a different way from the other vowels and that *ə could neither be long or stressed. But how *ə influenced PAN accent was not investigated in his study. In the present study, I argue that schwa does affect the assignment of stress in Paiwan and that accent could fall on a penultimate /ə/ in a reduplicated word.

Paiwan is a language with a five-vowel system. Among the five vowels, only /a/, /i/ and /u/ can occur at the word-initial position, though VCV syllable is allowed in Paiwan. Vowels /ə/ and /o/ are much restricted than the other vowels, as indicated by the lower frequency of occurrence in my fieldwork corpus. If an unaffixed word does not have a weak schwa /ə/ in the penult, it will receive penultimate stress, as shown in (1). If a word has a schwa in the penult, it will receive final stress, as shown in (2). I argue that Paiwan has a quality sensitive stress system. Stress shift does not change the syllabic trochees from right to the left. Foot construction and ending rule right must occur before stress shift. Interestingly, the shift effect due to schwa was blocked at accent level of a prosodic word. The assignment of accent in Paiwan reduplicated words is fixed to a penultimate position, regardless of the quality of the vowel at penult, as shown in /kəɖikəɖi/ [kəɖikəɖi] 'very small/kid'. Furthermore, Piuma Paiwan has been found to be in contact with Japanese and has developed a pitch accent system with initial-accented and second accented contrast, as shown in (3).

I argue that the phenomenon is accounted for by the interaction of prosodic domains within a prosodic word. Piuma Paiwan has both stress and accent systems. Schwa affects the assignment of stress but not accent. The loss of stress in schwa penult may result in shortening or deletion. On the other hand, schwa at a final closed syllable is lengthened when it is stressed. At phrase-level, /ə/ penult can be accented. The most prominent syllable (with or without /ə/ penult) of a second right-edge constituent is usually more prominent than that of a constituent located at leftmost or rightmost edge.

Data:

(1) Words with Penultimate Stress

a.	/vavajan/	[vavájan]	'woman'
b.	/vitsuka/	[vitsúka]	'stomach'
c.	/tsaliŋa/	[tsalíŋa]	'ear'
d.	/kajunaŋa/	[kajunáŋa]	'earth'

(2) Words with Final Stress

a.	/vəcək/	[vəcək]	'elder sibling'
b.	/kəmələŋ/	[kəmələŋ]	'to know'
c.	/cəvʉs/	[cəvúʉs]	'sugarcane'
d.	/masəŋsəŋ/	[masəŋsəŋ]	'to work'

(3) a.	/paisu/	[pái su]	'money'
	/paisu/	[pai sú]	'(imperative) Pestle (the millet)!
b.	/katsu/	[ká tsu]	'(imperative) Bite!'
	/katsu/	[ka tsú]	'(imperative) Bring (it)!'

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