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## Extrametricity in Budai Rukai

This paper investigates the stress patterns, the occurrence of echo vowels, and the extrametricality in Budai Rukai, an Austronesian language spoken in Taiwan, with less than 3,000 speakers. Segmental phonemes of Budai Rukai have been briefly introduced in earlier field reports (Li, 1977a; Zeitoun, 2000), but a clear picture on segmental phonology, word stress, and prosodic formation is scanty. Furthermore, stress in Budai Rukai has been a controversial issue in earlier studies (Li, 1977a; Ross, 1992; Blust, 1997), but none of them offer a proper account for the prosodic patterns in Budai Rukai. In the present study, the restrictions of echo vowels, stress and accent patterns, and the interrelationship between echo vowels and extrametricality are explicitly described and clarified.

Words in Budai Rukai generally end with a vowel. Echo vowels are present in roots or stems, affixes, and the other independent words of Budai Rukai. In the present study, the occurrence of echo vowels in affixation is subject to the syllable type of the following suffixes. Echo vowels are treated as epentheses to avoid consonantal coda in Budai Rukai. Moreover, echo vowels are extrametrical in the representation of stress, pitch accent, and beyond word-level prosody. Final syllables at the right edge of a Budai prosodic word are extrametrical. In the word-prosody of Budai Rukai, echo vowels are never stressed and never lengthened. Furthermore, a cautious examination on the Budai prosodic words has revealed that the so-called regional accent is a type of pitch accent imposed on long vowels, not short vowels. The melody is always aligned with penultimate long vowels. Echo vowels do not get metricality in word-prosody of Budai Rukai, neither in regional nor imperative accent.

It is concluded that echo vowels, though appear to be obligatory in the syllable template of Budai Rukai, are phonetically and phonologically invisible in stress footing and accent alignment. With an account of syllable extrametricality, the prosodic patterns of Budai Rukai in the present study not only provide new evidence for the reconstruction of Proto-Austronesian (PAN) stress but also elucidate Ross's (1992) proposal that the oxytones of Budai are apparently the last remnants of PAN contrastive stress.

## References

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