Stress and Affixation in Isbukun Bunun
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Isbukun, a major dialect of Bunun, is one of the Austronesian languages spoken in Taiwan. As Mandarin and Southern Min are the predominant languages, the Austronesian languages in Taiwan including Bunun are endangered. According to the Taiwan government statistics in 2009, Bunun had a population of 51,447, around half of which were registered as Isbukun. From our experience in the field, people under 40 years old do not speak Isbukun Bunun fluently.

This study analyzes the stress patterns in Isbukun Bunun from the perspective of Optimality Theory. In Isbukun Bunun, a single quantity-sensitive trochee formed at the right edge of words (Huang 2003). Consequently, prefixation is normally irrelevant to footing, whereas suffixation potentially interacts with stress assignment. This paper focuses on two aspects of the stress patterns in suffixed words. One is the quantitative changes which remedy the violations induced by suffixation against footing constraints, especially vowel shortening (Ex. 1) and vowel fusion (Ex. 2). The other is the “stress shifts” caused by affix-specific and word-initial extrametricality.

The quantitative changes of vowels are captured by the following constraint hierarchy: Integrity-IO, ALL-FT-R >> MAX-μ >> PARSE-σ, Uniformity-IO. In regard to the positional and lexical extrametricality, two constraints and the related rankings are presented as below:

*ANCHOR-L(PrWd, Stem) is proposed to account for the fact that underlyingly bimoraic roots do not maximally obey PARSE-σ in the above constraint hierarchy in suffixation (Ex. 3a & 3b). *ANCHOR-L(PrWd, Stem) interacts with DEP-μ and Intergrit-Y-IO: DEP-μ >> *ANCHOR-L(PrWd, Stem) >> Intergrity-IO >> PARSE-σ keeps monomoraic (Ex. 3c) and polymoraic (EX. 3d & 3e) roots unaffected, but leaves the first mora of a bimoraic root unparsed in order not to build a foot at the left edge of a root. Non-initiality, although controversial as an OT constraint, is attested in a variety of American Indian languages as well as some Altaic, Bantu, Finno-Uralic, and Irish languages (Buckley 2009). This study provides evidence of initial extrametricality in the Austronesian language family and argues for *ANCHOR to be one of the driving forces.

Indexed CrispEdge(Stem, FT) (adapted from Walker 2001) is used to differentiate Type A suffixed words, where the suffixes are never part of a foot (Ex. 4), from Type B suffixed words, which are parsed as non-affixed words (Ex. 5). The CrispEdge constraints interact with ALL-FT-R: CrispEdge(Stem, FT)A >> ALL-FT-R >> CrispEdge(Stem, FT) makes Type A but not Type B suffixes extrametrical. Broadly speaking, Type A suffixes are inflectional while Type B suffixes are derivational, in the sense that Type A suffixation does not form new stems while Type B suffixation do. Type A suffixes can be attached to a word formed through Type B suffixation but not vice versa. The different stress patterns of suffixes are motivated by their morphological status.

(1) /sisasa: + -un/  *sisaˊ(sa:)un  sisaˊ(saun)  ‘tolerated (pat.)’
    /pandu: + -an/  *panˊ(du:)an  panˊ(duan)  ‘stopped (loc.)’

(2) /sisasa: + -an/  *sisaˊ(sa:)an  sisaˊ(sa:n)  ‘tolerated (loc.)’
    /pandu: + -un/  *panˊ(du:)un  panˊ(du:n)  ‘stopped (pat.)’
(3) a. /mu: + -an/ *'(muan) mu´(uan) ‘your place (loc.)'
    b. /ku- + sia + -an/*kuˇ(sonian) kusiˇ(a:n) ‘used (loc.)’
    c. /hud + -an/ *'(hudan) *hu´(udan) ‘drunk (loc.)’
    d. /masmu:l + -a/ masˇ(mula) *masmu`(ula) ‘soak (imp.)’
    e. /pandia + -an/ panˇ(dian) *pandi´(a:n) ‘dish (loc.)’

(4) *'(maduh) ‘millet’ *'(maduh)-tan ‘this millet’
    kaˇ(nahtuŋ) ‘finish’ kaˇ(nahtuŋ)-in ‘have finished (perf.)’

(5) *'(tulmi) ‘thread’ tulˇ(mi-að) ‘noodles’
    talˇ(danav) ‘wash face’ taldaˇ(nav-an) ‘basin (loc.)’

References
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