Prominence over boundary in prefix stress resistance | RFP2022 Abstract

Noah Elkins | University of California, Los Angeles, USA | noahelkins1@g.ucla.edu

In this paper, I present evidence of a novel stress asymmetry based on crosslinguistic data from 138 languages: prefixes almost never shift stress leftward if a language's default stress is initial, whereas peninitial stress languages willingly incorporate prefixes into their stress assignment domains. Of all the prefixing languages surveyed with reliable data, all peninitial stress languages (7/7) incorporate prefixes, and all but one initial stress languages (30/31) do not. Two characteristic examples are given below (primary-stressed syllables boldfaced):

(1)   Prefix stress resistance in initial Tenango Otomi (Blight & Pike 1976)

     a.   ˈ**thè**be   'beads'   b.   ˈ**zà**fànĩ   'cornstalk

        m̰ǎ-zí-ˈ**thè**be   'my little beads'   ra-ˈ**zà**fànĩ   'DET-cornstalk'

(2)   Prefix stress incorporation in peninitial Osage (Quintero 2004)

     a.   ðaahˈ**tã**   'drink'   b.   ðaˈ**waa**   'count'

        ã-ˈ**wa**-ðaahˌtã 'we drink'   wa-ˈ**ða**waa   'count sth.'

Two potential analyses of prefix stress resistance in initial stress systems are entertained. First is STRESS-Rσ1, which simply requires root-initial syllables to be stressed. This constraint is undominated in initial stress languages (3). In cases including secondary stress, we can also postulate a constraint in which root stress is always primary. In peninitial-stress languages on the other hand, STRESS-Rσ1 is outranked by foot structure constraints, leading to prefixes' incorporation into the stress assignment domain (4).

(3)

/thèbe/	STRESS-Rσ1	TROCHEE	ALL-FT-LEFT	PARSE-σ
☞ a. (ˈthèbe)				
b. (thèˈbe)	*!	*		
/m̰ǎ-zí-thèbe/	STRESS-Rσ1	TROCHEE	ALL-FT-LEFT	PARSE-σ
☞ a. m̰ǎ-zí-(ˈthèbe)			**	**
b. (ˈm̰ǎ-zí)-thèbe	*!			**
c. m̰ǎ-(zí-ˈthè)be		*!	*	**

(4)

/ðaahtã/	IAMB	ALL-FT-LEFT	STRESS-Rσ1	PARSE-σ
☞ a. (ðaahˈtã)			*	
b. (ˈðaahtã)	*!			
/ãk-ˈwa-ðaahtã/	IAMB	ALL-FT-LEFT	STRESS-Rσ1	PARSE-σ
☞ a. (ã-ˈwa)-(ðaahˌtã)			*	
b. ã-(wa-ˈðaah)tã		*!		**
c. ã-wa-(ˈðaahtã)	*!	**		**

The second possibility, which I reject, utilizes ALIGN-L(Root, PrWd) to interpose a prosodic boundary between the root and any prefixes. This constraint prefers the root to initiate a new prosodic word, which would then be the domain of footing. This account fails to explain the difference between initial- and peninitial-stress languages, as the ALIGN constraint is not sensitive to foot type:

(5)

/mã̀-zí-thèbe/	ALIGN-L(Root, PrWd)	TROCHEE	PARSE-σ
☞ a. mã̀-zí-[(ˈthèbe)]ω			
b. [(ˈmã̀-zí)-thèbe]ω	*!		**
/ãk-wa-ðaahtã/	ALIGN-L(Root, PrWd)	IAMB	PARSE-σ
💣 a. ã-wa-[(ðaahˈtã)]ω			
☹ b. [(ã-ˈwa)-ðaahtã]ω	*!		**

The need to analyze this stress asymmetry as root-initial prominence maintenance shows a novel instance of root-initial syllables resisting phonological alternation (e.g. Becker et al. 2012). It is likely that this resistance is due to the high degree of psycholinguistic salience carried by root-initial position but not necessarily by word-initial positions, due to root-initial material being highly relevant to lexical access (Gaskel & Marslen-Wilson 2002). As such, we can offer a likely functional explanation for root-initial stress maintenance in initial stress languages: STRESS-Rσ_1 is highly ranked for these languages due to its psycholinguistic grounding – shifting stress, which itself is an important cue for lexical access, leftward under prefixation would blur the highly salient root-initial percept. (The sole apparent counter-typological case, Bardi (Nyulnyulan; Bowern 2012), does give initial stress to prefixes: however the root-initial syllable must also bear at least secondary stress, even if it induces clash, indicating that STRESS-Rσ_1 is still undominated in this language.) Conversely, constraints that aim to maintain stress in medial/final positions either do not exist or are ranked lower in a stringency hierarchy (de Lacy 2004).

To assess the validity of this assumption, I undertook two companion crosslinguistic surveys of ultimate-stress languages and penultimate-stress languages to see if they include suffixes into stress assignment domains at statistically higher rates than initial stress languages. Of the over 200 languages in these surveys, around 90% of them with reliable sources were found to incorporate suffixes, indicating that root-final positions are nowhere near as resistant to alternation as root-initial position, thus confirming the hypothesis.

References
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