

§1 – OVERVIEW

Two interrelated questions of word-prosody are addressed, one analytic and one typological:

- How is STRESS determined in Cupeño (Takic, Uto-Aztecan)?
- What morphophonological principles govern stress assignment in languages with LEXICAL ACCENT (LA) cross-linguistically?

Alderete (2001b) argues that Cupeño stress uniquely *requires* accentual ROOT FAITHFULNESS; alternatively:

- (1) LEFTMOST WINS (LM): Stress is assigned to the leftmost morpheme that bears lexical pre-specification for prominence (ACCENT), otherwise to the word's leftmost syllable.
⇒ Cupeño provides no support for privileged faithfulness to the accentual properties of roots.

§2 – PUZZLE

Cupeño morphemes are accented, unaccented, or pre-accenting; each word has a single primary stress:

- (2) a. /√nəŋú - wənə/ → [nəŋú-wənə] 'have-CUST.PL' ⇒ phonologically unpredictable stress
b. /√ʔámu - wənə/ → [ʔámu-wənə] 'hunt-CUST.PL'
c. /√yax - wənə/ → [yáx-wənə] 'say-CUST.PL' ⇒ default left-edge stress
d. /√yax - qál/ → [ya-qál] 'say-PRS.SG' ⇒ accented suffixes attract stress away from (2d) unaccented roots but not (2e) accented roots — **why?**
e. /√nəŋú - qál/ → [nəŋú-qa] 'have-PRS.SG'

- Per Alderete (2001b), **root** accent in (2e) dominates affixal accent (MAX-PROM_{RT} >> MAX-PROM_{AFF}).
- Yet all data in (2) (and (3) below) is consistent with LM; in addition:
 - A left-edge stress preference is independently necessary to account for (2c).
 - New reduplication data from Hill (2005); only LM correctly predicts prefixal stress (non-stipulatively).

§3 – GENERALIZATIONS

(3) √UNACCENTED	√ACCENTED	ROOTS	SUFFIXES	"PREFIXES"
a. [pó-tama]	g. [pə-sáʔi]	/tama/ 'mouth'	/-qál/ (PST.IPV.SG)	/pə-/ (3SG)
b. [pó-yax]	h. [pə-náqma]	/yax/ 'say'	/-ŋa/ (LOC)	/pəm-/ (3PL)
c. [pə-ya-qál]	i. [pə-náqma-qal]	/max/ 'give'	/-wən/ (PST.IPV.PL)	/pi=/ (3SG.O)
d. [pə-tamá-ŋa]	j. [pə-sáʔi-ŋa]	/šáʔi/ 'belly'	/-wənə/ (CUST.PL)	/mi=/ (3PL.O)
e. [pi=pó-max]	k. [mi=pəm-náqma-wən]	/náqma/ 'hear'	/-qál/ (PRS.SG)	
f. [mi=máx-wənə]	l. [mi=náqma-qa]	/kəláw/ 'gather'	/-ʔaw/ (LOC)	

- Unaccented **roots** exhibit variable stress patterns (cf. Hill and Hill 1968):
 - Stress assigned to SBJ/POSS-prefixes by default in (3ab)
 - Stress attracted to accented/preaccenting suffix (as the only accented morpheme) in (3cd).
- Accented **roots** show fixed root stress — only accented morpheme in (3ghk) / leftmost in (3il).
- Crucially, (3e) also shows default leftmost stress; (3f) confirms that the initial element is a clitic (cf. Hill 2005:111–4) and stands outside the stress domain (e.g. "free clitic"; cf. Selkirk 1996).
 - Since (3e) does not require an accented prefix (i.e. "/pó-"/), (3c) does not show "rightmost wins" (contra Alderete 2001b).

§4 – IMPLEMENTATION

Stress patterns fall out from the interaction of (4a) with general LA constraints in (4b–d) as ranked in (5):

- (4) a. ALIGN-L(Pk, ω): Align the left-edge of a stressed σ with the left edge of a prosodic word (evaluated gradiently; one violation per intervening σ).
b. CULMINATIVITY: A prosodic word must have exactly one stressed syllable.
c. MAX/DEP-PROM: Don't delete/insert prominences between input and output representations. (cf. Revithiadou 1999; Alderete 2001a)

(5) CULMINATIVITY >> MAX-PROM >> ALIGN-L(Pk, ω), DEP-PROM

§5 – ANALYSIS I: CORE DATA

• Accented suffixes stressed with √UNACCENTED:

(6) /pə-√yax-qál/ → [pə-ya-qál] 'he was saying'

/pə-√yax-qál/	CULM	MAX	ALIGN-L	DEP
a. ☞ pə-ya-qál			**	
b. pə-ya-qal		*!		*

(7) /pəm-√yax-wən/ → [pəm-yax-wən] 'they were saying'

/pəm-√yax-wən/	CULM	MAX	ALIGN-L	DEP
a. pəm-yax-wən	*!			
b. ☞ pəm-yax-wən				*
c. pəm-yáx-wən			*!	*

• But √ACCENTED dominates accented suffixes:

(8) /pə-√kəláw-qál/ → [pə-kəláw-qal] 'she was gathering'

/pə-√kəláw-qál/	CULM	MAX	ALIGN-L	DEP
a. ☞ pə-kəláw-qal		*	**	
b. pə-kəlaw-qál		*	***!	
c. pə-kəlaw-qal		**!		*

✓ Default leftmost stress in (7)

- Core stress data is compatible with LM or Alderete's (2001b) ROOT FAITH analysis.
- Reduplication data provides crucial support for LM (§6).

§6 – ANALYSIS II: REDUPLICATION

Partial copy reduplication used for aspectual modification in verbs and pluralization in nouns/adjectives.

- Reduplicant is accented CV-prefix, inducing syncope of 1σ of base (if phonotactically licit; cf. Hill 2005:30–1):
 - (9) a. [nót] : [nóntam] 'chief/s' • RED is consistently stressed.
b. [ʔawólβə] : [ʔáʔwólβə] 'grown-up.SG/PL' • (9e) shows non-default stress (unaccented /yax/).
c. [túlmikiʃ] : [túlmikiʃ] 'black.SG/PL' ⇒ RED itself is accented (i.e. /RÉD/).
d. [pájij] : [pápajij] 'new.SG/PL' • In (9b) RED copies unaccented σ of the base, but attracts stress away from its accented σ.
e. [pó-yax] : [pə-yáyax] 'he says/repeatedly' ⇒ RED accent dominates root accent.
f. [ki-ʔaw] : [kiki-ʔaw] 'house-LOC.SG/PL'
- Reduplication data in (9) must be stipulated under a ROOT FAITH analysis but is *predicted* by LM.
 - Simplified tableaux for (9b) and (9e) in (10–11); (10a) is incorrectly preferred under ROOT FAITH.

(10) /RÉD-ʔawólβə/	CULM	*COMPLEX	MAX-PROM	ALIGN-L	SWP _{RED}	MAX-V
a. ☞ [ʔáʔwólβə]			*	*!		*
b. ☞ [ʔáʔwólβə]			*			*
c. [ʔáʔwólβə]	*!					*
d. [ʔáʔawólβə]			*		*!	

(11) /pə-RÉD-yax/	CULM	*COMPLEX	MAX-PROM	ALIGN-L	SWP _{RED}	MAX-V
a. ☞ pə-yáyax				*	*	
b. pə-yayax			*!		*	
c. pə-yáyax		*!		*		*
d. pə-yáyax			*!	**		

§7 – CONCLUSION: TOWARD A RESTRICTIVE TYPOLOGY OF LA

- Most LA systems are derivable from different rankings of constraints that:
 - Prefer stress at (left or right) word-edge
 - Require faithfulness to underlying accents
 - Preferentially stress morphological heads (cf. Revithiadou 1999)
- Under the LM analysis, Cupeño is typologically unexceptional, showing (i) and (ii) but not (iii).
 - LM pattern has close analogue in Kiparsky and Halle's (1977) BASIC ACCENTUATION PRINCIPLE, which governs stress in several (ancient) Indo-European languages (cf. Kiparsky 2010; Yates 2016).
- Gradient alignment? (cf. McCarthy 2003)
 - The proposed analysis assumes gradient evaluation of alignment constraints, which also appears to be necessary in other LA systems, e.g. Nez Perce (Bjorkman 2010; cf. Crook 1999).
- ROOT FAITH — a type (iv) LA system? (cf. Alderete 2001a)
 - Without Cupeño, no clear evidence that accentual root faithfulness plays a role in LA systems.