§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 - qá/ → [ya-qáʔ] 'say-PRS.SG' ⇒ accented suffixes attract stress away from (2d) unaccented roots but not (2e) accented roots — **why?**
    e. /√nəŋú - qá/ → [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.	[pə́-tama]	g.	[pə-ṣáʔi]	/tama/	'mouth'	/-qál/ (PST.IPV.SG)		/pə-/ (3SG)
b.	[pə́-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-ṣáʔi-ŋa]	/ṣáʔi/	'belly'	/-wəne/ (CUST.PL)		/mi=/ (3PL.O)
e.	[pi=pə́-max]	k.	[mi=pəm-náqma-wən]	/náqma/	'hear'	/-qá/ (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. "/pə́-/"), (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. pə́-ya-qal		*!		*

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

/pəm-√yax-wən/	CULM	MAX	ALIGN-L	DEP
a. pəm-yax-wən	*!			
b. ☞ pə́m-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-qal		*!	***	
c. pə́-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. [nə́t] : [nə́ntam] 'chief/s'
    b. [ʔawólβə] : [ʔáʔwəlβə] **'grown-up.SG/PL'**
    c. [túlnikiʃ] : [tútulnikiʃ] 'black.SG/PL'
    d. [páŋiʃ] : [pápaŋiʃ] 'new.SG/PL'
    e. [pə́-yax] : [pə-yáyax] **'he says/repeatedly'**
    f. [kí-ʔaw] : [kíki-ʔaw] 'house-LOC.SG/PL'

· RED is consistently stressed.
· (9e) shows non-default stress (unaccented /yax/).
  ⇒ RED itself is accented (i.e. /RÉD/).
· In (9b) RED copies unaccented σ of the base, but attracts stress away from its accented σ.
  ⇒ RED accent dominates root accent.

- 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. (☹) ʔaʔwəlβə			*	*!		*
b. ☞ ʔáʔwəlβə			*			*
c. ʔáʔwólβə	*!					*
d. ʔáʔawəlβə			*		*!	
(11) /pə-RÉD-yax/						
a. ☞ pə-yáyax				*	*	
b. pə́-yayax			*!	*		
c. pə-yáyx		*!		*		*
d. pə-yayáx			*!	**		

§7 – CONCLUSION: TOWARD A RESTRICTIVE TYPOLOGY OF LA

- Most LA systems are derivable from different rankings of constraints that:

  (i) Prefer stress at (left or right) word-edge
  (ii) Require faithfulness to underlying accents
  (iii) 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.