

PWd Recursion Parallels Morphosyntax in Creek Grades



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STRESS & GRADES: DATA

Phenomenon: Aspectual morphemes cause Stem-final phonological change in Creek (Muskogean: USA), known as “grades” (Haas 1940, Martin 2011)

- Non-graded = short Stem-final vowel
- Graded = long Stem-final vowel; tone

Paradigm of Graded Verbs

Stem UR	/wanay-/ 'tie'	/a-wanay-/ 'to'-tie'
Non-Graded	[(wa.'na).y-as] "tie!"	[(a.'wa).(na.'y-as)] "tie to!"
Lengthened Grade	[(wa.'na: ^H).y-i ^{Hs}] "is tying"	[(a.'wa).(na: ^H).y-i ^{Hs}] "is tying to"
Aspirated Grade	[(wa.'nah).y-is] "(recently) tied"	[(a.'wa).(nah).y-is] "(recently) tied to"
Falling Grade	[(wa.'na: ^H).y-is] "is tied"	[(a.'wa).(na: ^H).y-is] "is tied to"
Nasalized Grade	[(wa.'na: ^H).y-is] "keeps tying"	[(a.'wa).(na: ^H).y-is] "keeps tying to"

Grades expone aspectual heads distinguished by autosegmental material (no separate suffixes)

- Eventive: “Lengthened” – High spreading tone /^H/
- Perfective: “Aspirated” – Spread glottis /h/
- Resultative Stative: “Falling” – Falling tone /^HL/
- Expressive: “Nasalized” – Nasalization /~/ + Rising tone /^HH+/

Graded forms contrast with non-graded forms in prosodic patterns

Regular Stress in Creek: Left-to-right iambs {('H), (L' L), (L' H)} (Haas 1977, Martin 2011)

Verb stems (= root, prefixes & inner suffixes) exhaustively parsed

Outer suffixes (post-Stem) can get regular stress to parse unstressed Stem-final syllable

- /LLL_{Stem}-σ_{O.Sfx}/ → [(L' L)(L'-σ)]

Verb Stem Stress Patterns (Non-graded Forms)

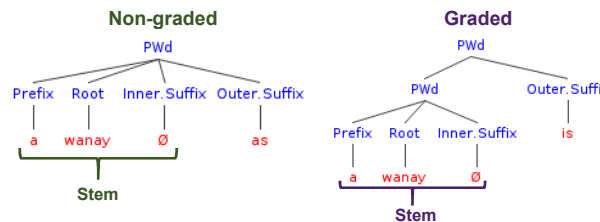
Stem Prosody	Input	Surface Form
Heavy: ...('H) _{Stem} -σ _{O.Sfx}	/homp-as/ 'eat'-IMP	[('hom).p-as] "eat!"
Even Parity: ...((L' L) _{Stem} -σ _{O.Sfx})	/wanay-as/ 'tie'-IMP	[(wa.'na).y-as] "tie!"
Odd Parity: ...((L' L)(L _{Stem} -σ _{O.Sfx})	/a-wanay-as/ 'to-tie'-IMP	[(a.'wa).(na.'y-as)] "tie to!"

PROPOSAL: PWd RECURSION

Differences between Non-Graded and Graded Forms

1. Stem-final syllable
 - Non-graded: can be short
 - Graded: must be long
2. Final regular stress
 - Non-graded: can fall on Outer Suffix
 - Graded: must fall on Stem-final syllable

Claim 1: Stem = Internal PWd in Grades

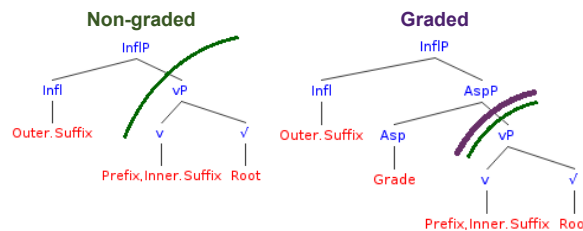


Claim 2: PWd recursion parallels morphosyntactic structure

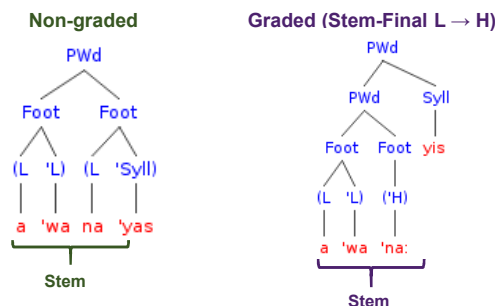
Difference in morphosyntactic status:

- Verbalizer v (forms unit (Stem) with complement)
- Event-modifier Asp (complement = PF-isolable chunk)

Graded Verb: PF-isolability of Stem = PWd Boundary



Parsing Input /LLL_{Stem}-σ_{O.Sfx}/ : /a-wanay_{Stem}/



STRESS & GRADES: ANALYSIS

Stress: FTBIN, PARSE-σ(STEM) >> ID-V(LONG)

Odd Parity Stem, Non-graded: Stress outside Stem

/LLL _{Stem} -σ/	FTBIN	PARSE-σ(STEM)	ID-V(LONG)
☞ [(L' L)(L'-σ)] _ω			
[(L' L)('H)-σ] _ω			* W
[(L' L)L-σ] _ω		* W	
[(L' L)('L)-σ] _ω	* W		

Graded forms: PWd boundary at Stem edge prevents Foot crossing over onto outer suffix

To exhaustively parse Stem, Stem-final syllable = heavy

Odd Parity Stem, Graded: Stem-Final Stress

/LLL _{Stem} -σ _{Grd} /	FTBIN	PARSE-σ(STEM)	ID-V(LONG)
☞ [(L' L)('H)] _ω -σ] _ω			*
[(L' L)L] _ω -σ] _ω		* W	L
[(L' L)('L)] _ω -σ] _ω	* W		L

Final stress in Creek = most prominent (Haas 1977)

Grades: **Stem-final** syllable = **most prominent**

Prominence **attracts autosegments** (aspect) into Stem

- Falling Grade /^HL/ – [(a.'wa)(na:^H)]_ωy-is]_ω

Docking of autosegments **lengthens** Stem-final vowel

- Falling Grade /^HL/ – [(wa.na:^H)]_ωy-is]_ω

IMPLICATIONS

Creek grades support recursion of prosodic categories (Selkirk 1995, Ito & Mester 2012, Elfner 2015)

- Simple reference to morphological structure is not sufficient

Similar to suffix-based templates in Yokuts languages: also effect of PWd recursion (Guekuezian in prep)

Next Steps: What other morphophonological changes result from PWd recursion paralleling morphosyntax?

See handout for notes and references