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

<table>
<thead>
<tr>
<th>Stem UR</th>
<th>/wanay/-‘tie’</th>
<th>/a-wanay/-‘to’-‘tie’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Graded</td>
<td>[(wa.ˈna)]-y-as</td>
<td>[(a.ˈwa).na.-y-as]</td>
</tr>
<tr>
<td>Lengthened Grade</td>
<td>[(wa.ˈna)]-y-iSs</td>
<td>[(a.ˈwa).na.-y-iSs]</td>
</tr>
<tr>
<td>Aspirated Grade</td>
<td>[(wa.ˈnaːh)]-y-is</td>
<td>[(a.ˈwa).naːh]-y-is</td>
</tr>
<tr>
<td>Falling Grade</td>
<td>[(wa.ˈnaːm)]-y-is</td>
<td>[(a.ˈwa).naːm]-y-is</td>
</tr>
<tr>
<td>Nasalized Grade</td>
<td>[(wa.ˈnāːm)]-y-iSs</td>
<td>[(a.ˈwa).naːm]-y-iSs</td>
</tr>
</tbody>
</table>

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

- Eventive: “Lengthened” – High spreading tone (H)
- Perfective: “Aspirated” – Spread glottis /h/
- Resultative Static: “Falling” – Falling tone (H)
- Expressive: “Nasalized” – Nasalization /~/ + Rising tone (H)

Graded forms contrast with non-graded forms in prosodic patterns

Regular Stress in Creek: Left-to-right iambics (‘H), (L, L) (Haas 1977, Martin 2011)
Verb stems (= root, prefixes & inner suffixes) exhaustively parsed

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

- /LLLStem-σStem/ → [(L L)l-σ]

Verb Stem Stress Patterns (Non-graded Forms)

<table>
<thead>
<tr>
<th>Stem Prosody</th>
<th>Input</th>
<th>Surface Form</th>
</tr>
</thead>
</table>
| Heavy: –[ˈH] | /homp/as/ | [(ˈhomp)As/]
| Even Parity: –[ˈL] | /wanay-as/ | [(wa.ˈna)-y-as] |

POPROAL: 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

Graded: Stress in Creek = most prominent (Haas 1977)
Grades: Stem-final syllable = most prominent
Prominence attracts autosegments (aspect) into Stem
- Falling Grade /H/ → [[(wa.ˈwa)]-y-is]
- Docking of autosegments lengthens Stem-final vowel

Final stress in Creek is most prominent (Haas 1977)
Grades: Stem-final syllable = most prominent
Prominence attracts autosegments (aspect) into Stem
- Falling Grade /H/ → [[(wa.ˈwa)]-y-is]

IMPLICATIONS

Creek grades support recursion of prosodic categories (Selkirk 1995, Ito & Mester 2012, Elfen 2015)
- Simple reference to morphological structure is not sufficient
- Similar to suffix-based templates in Yokuts languages: also effect of PWd recursion (Guekguez in prep)
Next Steps: What other morphophonological changes result from PWd recursion paralleling morphosyntax?

STRESS & GRADES: ANALYSIS

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

Odd Parity Stem, Non-Graded: Stress outside Stem

/LLLStem-σStem/ /FTBIN/ PARSE-OF(STEM) /ID-V(LONG)/

Odd Parity Stem, Graded: Stem-Final Stress

/LLLStem-σStem/ /FTBIN/ PARSE-OF(STEM) /ID-V(LONG)/

See handout for notes and references