Tonal suppletion as multi-modal featural affixation

Allomorphy in Kalam Kohistani

1. Complementary distribution of affix-µ and affix-Ł
   - C-final bases: affix-µ not realized since there are no trinominal syllables.
   - V-final bases integrate affix-µ (and affix-Ł) but never affix-L as well.
     - a new association between elements belonging to the same morpheme (b.) excluded by Alternation (van Oostendorp, 2007, 2012)
     - no crossing association lines (c.)

2. A preference for associating the affix-µ

3. H-overwriting vs. minimal association of L
   - spread of the affix-Ł avoids marked L-tones (+Ł)
   - preservation of L-tones in the absence of affix-Ł tones: high-ranked DerŁ and AŁ Ł

Extension: vowel mutation

Theoretical challenge

Polyrepresentational

Monorepresentational

Lexical Insertion:

Phonology:

A monorepresentational analysis for Kalam Kohistani?

- Why should the nature of the base-final segment (C or V) determine the choice between realizing an H- or L-tone?
- Why is the L-tone only realized at the right edge whereas the H-tone overwrites the base tone melody completely?

Main Claim

Inflection for V-final forms also involves final V-lengthening.

Such a multi-modal nonconcatenative exponent is predicted in an autosegmental account that assumes (complex) floating autosegments as representations for morphemes (Lieber, 1992; Wolf, 2007).

The exponent for noun inflection in Kalam Kohistani: \[-H_L\]

- minimal overwriting for affix-Ł except:
  - polysyllabic bases with an LH melody due to "LHL"
  - no effect for monosyllabic LH bases due to preservation of initial H (Beckman, 1998)

4. Complementary distribution of affix-Ł and affix-Ł
   - realization of the affix-Ł no realization of affix-Ł:
     - either the affix-Ł has two root nodes (b.), violating (4)
     - or the association line between affix-Ł and its µ is marked as invisible (c.)

(Where 'root node' is defined as a node that is not dominated by a higher root node.)

- different vowel mutation patterns (±affecting height)
- different locality conditions (±affecting all V’s) since the morphemes are of different complexity: the floating V feature [±back] spreads through the word, the floating feature complex with a segmental root node associates locally.
- different targets (±high) follow from different complexity as well: underlying [+high] V’s are preserved, but if underlying [+high] is overwritten by affix, this faithfulness constraint is not decisive anymore
Appendix: Constraints and full tableaux

1. Constraints

(defined in terms of coloured containment-theoretic OT where deletion of phonological elements and association lines is impossible (McCarthy and Prince, 1995; van Oostendorp, 2006; Trommer, 2011; Trommer and Zimmermann, 2014; Zimmermann, 2014))

1. Constraints

(a) MaxL_M (parallel: MaxH_A and MaxA_M)
Assign a violation mark for every affix L-tone that is not dominated by the highest prosodic node via an uninterrupted path of phonetically visible association lines.

(b) MaxL_M (parallel: MaxH_A and MaxA_M)
Assign a violation mark for every stem L-tone that is not dominated by the highest prosodic node via an uninterrupted path of phonetically visible association lines.

(c) MaxT_H_M
Assign a violation mark for an association line between an affix-μ and an affix-tone that is marked as phonetically invisible.

(d) MaxT_S_M
Assign a violation mark for an association line between a stem-μ and a stem-tone that is marked as phonetically invisible.

(e) MaxH_M
Assign a violation mark for every phonetically invisible H that is associated to the first syllable.

2. Tableaux

2.1. V-final bases

(3) Monosyllabic L-toned base: long final V and only H

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2.2. C-final bases

(5) Polysyllabic L-initial base with H on second syllable: all L
(6) Monosyllabic L-toned base: final falling contour

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b. [bó: r]

c. [bó: r]

d. [bó: r]

(7) Monosyllabic LH-base: no change

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a. [bó: g]

b. [bó: g]

c. [bó: g]

d. [bó: g]

References


van Oostendorp, Marc (2012), ‘Stress as a proclitic in Modern Greek’, *Lingua* 122, 1165–1181.


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