Phase-based constraints within Match Theory

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Overview
Blackfoot (Algonquian) verbal complex contains:
- Phonology: two sets of phrasal domains
- Phrasal syntax: VP/VP, IP, CP

Phonological evidence: morpheme alternations; transcriptions based on orthography in dictionary.

Thesis: Match Theory (Selkirk 2011) cannot account for two types of "phrasal" correspondence.

Proposal: Match VP/VP phases to prosodic constituents, even "below the word".

Syntax
Stem is a phrasal VP/VP:
- Intransitive: [v-root-[V-V]vp]
- Transitive: [v-root-[V-V]vp]e

Minimal verbal complex: stem plus suffixes (P, C), Preffixes optional; some required by clause type.

Results: the stem domain is distinct from the verbal complex domain
1. Stem domain: syllable-driven epenthesis, causes [k]-assibilization to [t].

After C
[nitikxox-][k]pist-][a]-

After V
[amopi][m]-

Contrasts with: vowel-initial suffixes, which coalesce with preceding vowel.

2. Across right edge of stem: epenthesis does not cause [k]-assibilization.

After V
[nitik-kxomakom:][m]-

"We (excl.) love them.'

3. Across left edge of stem: root alternations determined by alignment to prosodic edges, not by syllable structure.

4. V-root alternations avoid certain segments at each left edge. (Verbal complex: *[\-cons]; stem: *(\-cont).

5. Two distinct prosodic constituent types:
- Verbal complex = CP, p-domain = { }
- Stem = VP/VP, p-domain = ( )

Analysis: Match as correspondence constraints (Lto and Mester 2019; Weber 2020)

Given an input syntactic representation S and an output phonological representation P, such that S\rightarrow P:

- MATCH\(3\)\(=[V \rightarrow \)P\(]W\)\(D\)\(=\)M\(3\)(VP): Assign a violation mark for every VP/VP in S which does not have a correspondent PWD in P.

- MATCH\(3\)(PWD\(\rightarrow\)VP\(\rightarrow\)VP\(\rightarrow\)PWD\(=\)M\(3\)(PWD): Assign a violation mark for every PWD in P which does not have a correspondent VP/VP phase in S.

EQUILATERS (EQS)\(\rightarrow\)S: Sister nodes in prosodic structure are instantiations of the same prosodic category. (Myrberg 2013)

BinMin\(\rightarrow\) (BN): A PP has must consist of at least two prosodic words. (Inkelas and Zec 1995)

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- MATCH\(3\)(PWD\(\rightarrow\)VP\(\rightarrow\)VP\(\rightarrow\)PWD\(=\)M\(3\)(PWD): Assign a violation mark for every PWD in P which does not have a correspondent VP/VP phase in S.


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Problems for Match Theory
Default correspondences:
- "clause" (= CP) \rightarrow Intonational Phrase (i, IPH)
- "phrase" (= XP) \rightarrow Phonological Phrase (p, PPH)
- "word" (= Lx) \rightarrow Prosodic Word (sa, PWd)

Problems:
1. Smallest prosodic domain = syntactic head (X\(\rightarrow\)\) are bound, functional suffixes.
2. Not all XPs are a phonological phrase (XPs = a \(\rightarrow\) a domain, a \(\rightarrow\) domain, or neither). No constraint ranking solves these issues.

Revision
Phase I: CP \rightarrow PPHs
Phase II: VP \rightarrow PWd

Selected References
Gustafsson, P. 2003. Prosodic recursion and syntactic cyclicity inside the low word. UCSD, PhD thesis.