Harmony Triggering as a Segmental Property

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Exceptionality in Harmony Triggering
- Many languages have harmonies triggered by subset of potential triggers:
  - Tongue root harmony in Classical Manchu (Zhang 1996)
  - Backness harmony in Hungarian (Vago 1980)
  - Morpheme indexation (Pater 2000) to harmony imperative constraints (e.g. SPREAD(F) (Padgett 1995)) over- and undergenerates patterns of harmony triggering

**Proposals:**
1. Idiosyncratic ability of some segments to trigger harmony is an encoded property of those segments
2. Encoded by deactivation parameter of subsegmental gestures

Representing Harmony with Gestures
- Gestures (Browman & Goldstein 1986, 1989): phonological units specified for multiple parameters (goal articulatory state, articulators, strength, etc.)
- Additional gestural parameter encodes whether gesture is self-deactivating or not (Smith 2016)
- Self-deactivating (non-harmony-triggering) gesture:
  - Activated but only lasts for a finite duration, then deactivates
- Non-self-deactivating (harmony-triggering) gesture:
  - Activated and maintains state
  - Non-self-deactivating gesture (harmony trigger) overlaps other gestures (harmony targets)

**Harmony Triggering vs. Inventory Shaping**
- Harmony is not driven directly by harmony-driving constraint
- Harmony results from non-self-deactivating gesture in language’s phonological inventory and surface forms
- Inventory shaped by markedness and faithfulness constraints to include (non-self-deactivating) gestures:
  - NONSELFDEACTIVATE(Gest,): penalizes self-deactivating ( ) gestures of type X (e.g. velum opening)
  - IDENT(deactivation): preserves underlying gestural deactivation parameter
- Phonemic triggering: grammar allows both self-deactivating and non-self-deactivating gestures to surface

**Problem:**
- Exceptionality in Harmony Triggering
- Potentially targets of harmony may also be indexed to SPREAD(F)
- Affix agreement with initial/final syllable of root: triggering

**Constraint Indexation & Undergeneration**
- Morpheme indexation cannot generate systems with triggering and non-triggering segments in same morpheme
- All segments bearing harmonizing feature in an indexed morpheme will trigger harmony
- Segment indexation cannot generate different distributional patterns of triggering and non-triggering segments
- Acehnese: non-triggering nasals restricted to stressed (final) syllable (Durie 1985); triggering nasals unrestricted
- Affix agreement with initial/final syllable of root: triggering segments restricted to root-edge syllables (Finley 2010)
- Constraint indices cannot be referenced by positional faithfulness/markedness constraints (unlike gestural parameters)
References


