Optionality in sibilant harmony: Experimental evidence from Kirundi
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INTRODUCTION

- Optionality is pervasive in consonant harmony (CH; Hansson 2001), e.g., optional sibilant harmony:
  - **Optionality type**
    - ‘free variation’Languages
      - Tepehua, Trutujil, Wiyot, Kiowa Apache, etc.
    - proximity-basedLanguages
      - Sarcee, Chiricahua Apache, Kinyarwanda
    - morphology-basedLanguages
      - Zaye, Basque, Barbareño Chumash, etc.
    - lexeme-specificLanguages
      - Slave, Southern Paiute, Beaver, etc.
  - Optionality reflects instability of CH systems
  - relative to vowel harmony and long-distance dissimilation.
  - A different mechanism – agreement by correspondence (ABC: Hansson 2001; Rose & Walker 2004),
  - error-prone processing of similar phonological categories.
  - A problem for formal analyses (either agreement or spreading).
  - Yet, no systematic studies of optionality in CH.

CASE STUDY: KIRUNDI

- **Kirundi** (Bantu) sibilant harmony (see 1a):
  - triggers: stem-final [ʃ] and [ʒ] ([=-ant] < /ʃ,z+/i,i/)
  - targets: stem-initial/medial /ʃ/ and /ʒ/ ([+=ant]).
  - Highly restricted and optional:
    - Proximity-based optionality (1ab)
      - adjacent syllables only (Rodegem 1970; Mpiranya & Walker 2006),
    - adjacent and non-adjacent syllables (Ntihirageza 1993).
    - Morphology-based optionality (1c)
      - Non-trigger: the causative /-i/- (all sources).
  - Free variation/lexeme-specificity (Meeussen 1959).
(1) Examples of harmony application and non-application.

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RESULTS

- Within- and across-speaker **optionality**, yet non-random (2).
- **Proximity – variable**
  - Adjacent syllables: a strong tendency towards harmony, categorical in some items.
  - Non-adjacent syllables: a strong tendency for harmony to fail, categorical in some items.
  - Sporadic application, even across intervening coronals.
- **Morphological conditioning – not categorical**
  - The causative suffix can be a trigger, albeit rarely.
  - Free variation/lexical specificity
    - Certain items pattern differently and/or are more variable.

DISCUSSION

- Sibilant harmony in Kirundi
  - is largely optional,
  - strongly influenced by phonological proximity, morphological complexity, and lexical specificity.
- Implications
  - Variable rankings of constraints (cf. Mpiranya & Walker 2006 on Kinyarwanda) are not sufficient.
  - To be combined with lexically-indexed constraints –
    - both IO faithfulness (cf. Coetzee & Pater, 2006) and C↔C Correspondence.

REFERENCES


ABC→C, University of California, Berkeley, 18-19 May, 2014

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