Morpho-phonological annotation of an archival corpus of Hocank (Winnebago)

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Goal: Make recordings searchable by morpheme, alternation type

Corpus

- Audio recordings, 1974-1975, with handwritten field notes
- Wisconsin Native American Languages Project, digitized by UWM Libraries
- ~28 hours of elicitation sessions with linguist Kenneth Miner
- ~7800 utterances
  - Mostly words in isolation
  - ~120 verb paradigms (often partial)
  - Most speech by Lavina Thorud (Máaxiánažiwa); 400 utterances by Robinson Johnson (Xíigugá)

Annotation project (summer 2017-present)

- stage 1: phonemic transcription in modified ARPABET; glossing
- ***stage 2: morphological and phonological analysis***
- also ongoing: transcription of English conversation during elicitation
- not yet begun: transcription of accent (often difficult to determine)

Corpus examples of some Hocank morpho-phonological alternations

- Eliding /h/
  - In lexically specified morphemes, /h/ elides word-internally.
    - Vowels brought together through this process create a diphthong.
      - tásak
      - /ta:-h-sa:k/ by.heat-1E.U-ROOT
      - ‘I am cold’ [read 110b]

- Eliding /w/
  - w → V / V _V (optional)
  - We found few examples of this, perhaps due to careful speech in elicitation conditions.
    - ní:náox ~ ní:náwox
    - /ní:náwox/ ‘beer’ [read 112b]

- Vowel length alternations
  - Long stem vowels shorten after a prefix.
    - ta:sak
    - /ta-sa.k/ by.heat-ROOT
    - ‘he is cold’ [read 111a]

  - Vowel lengthen before the declarative suffix –nã.
    - waxí:ná
    - /wa-xri:nã/ by.downward.pressure-ROOT-DECL
    - ‘he squashes it’ [read 119b]

  - V → [-long] / _V (fed by intervocalic h-elision)
    - tásak
    - /ta:-h-sa:k/ by.heat-1E.U-ROOT
    - ‘I am cold’ [read 111a]
    - (This example also shows nasality spread within a derived diphthong).

  - Obstructive voicing alternation
    - [-son] → [+voice] / ___ [neutral] [+son]
      - hoki[yi]ɾe
      - /ho-ki-yɾe/ APPL.NESS-RCP-ROOT-SBJ.3PL
      - ‘they help each other’ [read 121b]

- Copy vowel epenthesis (Dorsey’s Law)
  - g → V / [I] __ RV
    - kírikí [read 110a] ‘their house’
    - ‘he squashes it’ [read 119b]
  - r → r V
    - ‘he insults me’ [read 119b]

- Nasal spread
  - (l, a, u) → [+nasal] / [+nasal] ___

- Ablaut
  - /e/ becomes [a] before certain suffixes
    - hí:wadjaɾiːná
    - /hí:wadjaɾiːnã/ 1E.U-ROOT-OBJ.3PL-PL-DECL
    - ‘they push us’ [read 119b]

- Vowel deletion in declarative suffix
  - The declarative suffix –nã optionally loses its final vowel.
    - hí:waɾiːɾe-wí:nã
    - /hí:waɾiːɾe-wí:nã/ 1E.U-ROOT-BOB.3PL-DECL
    - ‘they start going back’ [read 119b]

Applications

Morpho-phonological analysis is helping us to clarify transcription issues such as vowel length, which is important for the study of accent. The annotation will enable researchers to find examples of particular morphological and phonological processes for further phonological or phonetic analysis.