Motivations for consonant epenthesis in nonstandard suffixed forms of Korean nouns

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1. Introduction

- Introduction
  o In Korean, when nouns are in isolation (i.e., unsuffixed), input stem-final consonant clusters (CC) undergo mandatory simplification via deletion, as in (2a-c):

    (1) Isolated: /talk/ [tak] ‘chicken’ (No variation)

    (2) Suffixed: /talk-l/ [tal.ki] ‘chicken-NOM’ (Variation among (2a-c))

    a. [tal.ki] (Standard with both Cs preserved)

    b. [la.ki] (Nonstandard Korean I with only one C preserved due to BASE-IDENTITY = Sec. following Kenstowicz’s (1996) BASE-IDENTITY and Steriade’s (2000) lexical conservatism)

    c. [tak.si] (Nonstandard Korean II with [s]-epenthesis)

  o [s]-epenthesis as in (2c) has been underestimated and reported as a speech error in Jun & Lee’s (2007) experiment.

- Objectives
  a. Variation in which stem-final CCs are resolved in Korean nouns
  b. Motivations for nonstandard suffixed forms with the epenthetic consonant [s] (i.e., Nonstandard II), both in nouns with input final CC (e.g., /talk-l/ [tak.si] ‘chicken-NOM’) and those with input final C (e.g., /pap-l/ [pap.si] ‘rice-NOM’) — position and quality of [s]

2. Experiment

- Participants
  o 20 native speakers of Korean from the Seoul metropolitan area (mean age: 23; range: 19-27)

- Speech materials
  o A corpus of modern spoken Korean (Sejong Corpus of Korean (the 4th edition)): to select nouns that are actually in use
  o Six input CCs that occur in the stem-final position in Korean nouns: /psl/, /lsl/, /lfl/, /fl/, /lm/
  o Twelve input Cs that occur in the stem-final position in Korean nouns: /pl/, /pfl/, /fl/, /l/, /il/, /il/, /cil/, /fpl/, /lm/, /m/, /lm/
  o Twenty-nine nouns were selected and used (= 15 nouns with stem-final CC + 14 nouns with stem-final C).

- Procedures
  o Two parts with two different methodologies: Part I and Part II

  a. Both Part I and Part II
    o Participants were asked to say the given nouns (either auditorily presented (Part I) or visually presented (Part II)) in suffixed forms by using the conjunctive suffix -iran ‘and’.
      (e.g., san sokkii hilk-iran tol ‘soil in the mountain and stone’)
    o Purpose of using this particular suffix: to show that variation with [s]-epenthesis occurs beyond the noun paradigms where vowel-initial case markers (e.g., -i NOM, -i ACC, -e DAT/LOC) are attached to nouns, as reported in other previous research.

    b. Part I: auditory presentation of target nouns
      o These nouns were auditorily presented to prevent participants from being affected by spelling.

      o 1,900 nouns were recorded:
        = [(4 irrelevant nouns for a training session x 2 repetitions) + (15 nouns with stem-final CC x 3 repetitions) + (14 nouns with stem-final C x 3 repetitions)] x 20 speakers

    c. Part II: visual presentation of target nouns (only numerals)
      o Purpose: to examine the cluster /lp/ in more detail and to investigate whether numerals behave differently since the cluster /lp/ occurs only with numerals related to jatlp ‘eight’ in Korean

      o These nouns were visually presented in Arabic numerals under each picture.
        (e.g., Participants saw a picture of an adult with the caption ‘18’ and a child with the caption ‘2’.)

      o 660 nouns were recorded:
        = [(3 irrelevant nouns for a training session x 2 repetitions) + (3 nouns with stem-final CC x 3 repetitions) + (6 nouns with stem-final C x 3 repetitions)] x 20 speakers

- Analysis
  o Analyzed the various suffixed forms of target nouns/numerals with stem-final CC and C recorded in Part I and Part II

3. Results

- Dominant patterns
  o Standard Korean forms, as in (2a) and Nonstandard Korean I forms, as in (2b).
  o Nonstandard Korean II with [s]-epenthesis consistently found for nouns with stem-final CC
    o /lp/ e.g., jatlp-iran ‘eight and’ [jat-lp.si.ran] ≠ [jat-lp.si.ran] - [jatlp.si.ran] (2.92%)
    o /lk/ e.g., talk-iran ‘chicken and’ [talk.si.ran] - [talk.si.ran] (6.18%)
  o Nonstandard Korean II with [s]-epenthesis consistently found for nouns with stem-final C
    o /lp/ e.g., klp-iran [klp.si.ran] ‘fear and’ (8.33%)
    o /lk/ e.g., culk-iran [culk.si.ran] ‘porridge and’ (1.67%)
    o /lk/ e.g., punk-iran [punk.si.ran] ‘kitchen and’ (6.67%)
  o In sum, in both parts, [s]-epenthesis occurs in phonologically systematic contexts: both in nouns with stem-final CC and in those with non-coronal stem-final C (i.e., contradicts the previous analysis that views [s] as a one-time speech error (Jun & Lee 2007)).

4. Discussion

- Position of the epenthetic consonant [s]
  o In onset of the second syllable (e.g., Italk-iran [tak.si.ran] ‘chicken and’)
  o Required by an OO-correspondence constraint CORR-G-ROLE (Aguero-Bautista 1998 in Kenstowicz 2005): “…if x and y are corresponding segments then x and y have the same syllabic analysis (onset, nucleus, coda),…”
    (e.g., Spanish dim.: [a.mor.-i-lo], [a.mor.-i-i-o] for amor ‘love’)
  o Named BASE-IDENTITY-SYL in the present study
  o Applied at the suprasegmental level to have the syllabic profile of the base form be preserved in the suffixed form
  o To preserve the coda consonant [k] in [talk] ‘chicken’ also in the coda position of the Nonstandard Korean II form, as in [talk.si.ran] ‘chicken and’

- Quality of the epenthetic consonant [s] (i.e., why [s]?)
  o Analogy from the dominant pattern in suffixed forms of nouns with a stem-final coronal obstruent
  o Various input stem-final coronal obstruents are neutralized to [s] in suffixed forms (Albright 2008)
    (e.g., /sotl-e/- [so.te] (the most frequent variant)
    -[so.te]-[so.te] ‘pot-DAT’ (Jun 2010))
  o /ls/ as a frequent input onset consonant in Korean according to a dictionary study (Shin 2010): supports the status of [s] as a highly probable epenthetic consonant

5. References