

Motivations for consonant epenthesis in nonstandard suffixed forms of Korean nouns

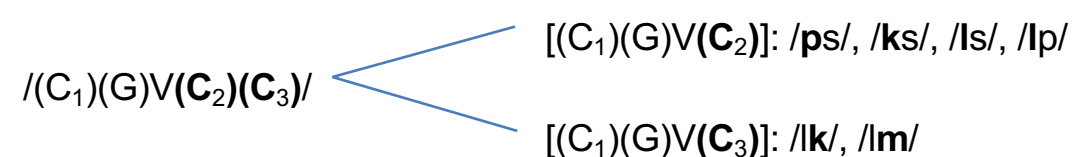
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1. Introduction

Introduction

- In Korean, when nouns are in isolation (i.e., unsuffixed), input stem-final consonant clusters (CC) undergo mandatory simplification via deletion, as in (1):



- In contrast, suffixed forms show variation when a vowel-initial suffix (e.g., *-i* NOM) is attached, as in (2a-c):

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

(2) Suffixed: /talk-i/ 'chicken-NOM' (Variation among (2a-c))

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

~ b. [ta.ki] (Nonstandard Korean I with only one C preserved due to BASE-IDENTITY-SEG following Kenstowicz's (1996) BASE-IDENTITY and Steriade's (2000) *lexical conservatism*)

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

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

Objectives

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

2. Experiment

Participants

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

Speech materials

- A corpus of modern spoken Korean (Sejong Corpus of Korean (the 4th edition)): to select nouns that are actually in use
- Six input CCs that occur in the stem-final position in Korean nouns: /ps/, /ks/, /ls/, /lp/, /lk/, /lm/
- Twelve input Cs that occur in the stem-final position in Korean nouns: /p/, /pʰ/, /tʰ/, /s/, /k/, /kʰ/, /c/, /cʰ/, /n/, /m/, /ŋ/, /l/
- Twenty-nine nouns were selected and used (= 15 nouns with stem-final CC + 14 nouns with stem-final C).

Experiment (cont.)

Procedures

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

a. Both Part I and Part II

- 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 sokii hilk-iran tol* 'soil in the mountain and stone')

- 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, *-il* ACC, *-e* DAT/LOC) are attached to nouns, as reported in other previous research.

b. Part I: auditory presentation of target nouns

- These nouns were auditorily presented to prevent participants from being affected by spelling.
- 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)

- 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 *jalp* 'eight' in Korean
- 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".)



- 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

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

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3. Results

- Dominant patterns**
 - Standard Korean forms, as in (2a) and Nonstandard Korean I forms, as in (2b).
- Nonstandard Korean II with [s]-epenthesis consistently found for nouns with stem-final CC**
 - /lp/ e.g., *jalp-iran* 'eight and' [ʌ.tʌlp.si.ran]~[ʌ.tʌl.si.ran]~[ʌ.tʌp.si.ran] (2.92%)
 - /lk/ e.g., *talk-iran* 'chicken and' [talk.si.ran]~[tak.si.ran] (6.18%)
- Nonstandard Korean II with [s]-epenthesis consistently found for nouns with stem-final C**
 - /p/ e.g., *klp-iran* [klp.si.ran] 'fear and' (8.33%)
 - /k/ e.g., *cuk-iran* [cuk.si.ran] 'porridge and' (1.67%)
 - /kʰ/ e.g., *pułkʰ-iran* [pu.łk.si.ran] 'kitchen and' (6.67%)
 - 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]**
 - In onset of the second syllable (e.g., /talk-iran/ [tak.si.ran] 'chicken and')
 - Required by an OO-correspondence constraint CORR-σ-ROLE (Aguero-Bautista 1998 in Kenstowicz 2005): "... [l]f x and y are corresponding segments then x and y have the same syllabic analysis (onset, nucleus, coda)." (e.g., Spanish dim.: [a.mo.ɾ.-si.t-o], *[a.mo.ɾ.-i.t-o] for *amor* 'love')
 - Named BASE-IDENTITY-SYL in the present study
 - Applied *at the suprasegmental level* to have the syllabic profile of the base form be preserved in the suffixed form
 - To preserve the coda consonant [k] in [tak] 'chicken' also in the coda position of the Nonstandard Korean II form, as in [tak.si.ran] 'chicken and'
- Quality of the epenthetic consonant [s] (i.e., why [s]?)**
 - Analogy from the dominant pattern in suffixed forms of nouns with a stem-final coronal obstruent
 - Various input stem-final coronal obstruents are neutralized to [s] in suffixed forms (Albright 2008) (e.g., /soʰ-e/ [so.se] (the most frequent variant) ~[so.cʰ-e]~[so.te] 'pot-DAT' (Jun 2010))
 - /s/ 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

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