

# Loanword Phonology

Yoonjung Kang

Kang, Y. (2011). Loanword phonology. *The Blackwell companion to phonology*, 1-25.

# 1 Introduction

- Adaptation
- affects all facets of phonological structure: segmental, phonotactic (suprasegmental, and morphophonological restrictions) of the borrowing language
- Native vs. loanword

## 2 Emergent patterns in loanwords

- Method: constraint-based models, where constraints are imposed on outputs.
  - This only solves one problem (why an adaptation takes place at all)
  - five others remained:
- 1 The too-many-solutions problem
- 2 Divergent repair
- 3 Unnecessary repair
- 4 Differential importation
- 5 Retreat to the unmarked

# (1) The too-many-solutions problem

- One illicit input in foreign languages → many possible outputs
- Hawaiian does not have a voiced stop /b/
  - English /b/ is systematically adapted as /p/ ('boulder' → [polu'ka]) and not /m/, /w/, or any other segment of the Hawaiian inventory

## (2) Divergent repair

- the repair chosen sometimes seems to contradict the native repair strategy. (Also called *ranking reversal*.)
- Thai requires the final syllable of a word to be heavy.
  - Native word: glottal stop insertion, as in /p<sup>h</sup>rá/ → [p<sup>h</sup>ráʔ] ‘monk’
  - Loanword: vowel lengthening as in coma → [k<sup>h</sup>ō:mê:]

### (3) Unnecessary repair

- adaptation takes place even when there is no apparent illicit structure in need of repair.
- Korean allows t<sup>h</sup>w cluster in onset position
  - but English ‘twin’ → [t<sup>h</sup>iwin], \*[t<sup>h</sup>win]

## (4) Differential importation

- a structure not attested in native phonology is exceptionally allowed in loanwords; only certain structures, but not others, are imported
- Hawaiian loanwords borrowed from English ‘truck’:
  - [kə'lakə] (fully nativized)
  - [tə'lakə] (less Hawaiian)
  - \*['krakə] (impossible)

## (5) Retreat to the unmarked

- loanwords conform to stricter structural requirements than the native phonology, to be more unmarked (no evidence from native phonology)
- In Hungarian, word-final voiceless obstruents in monosyllabic loanwords are geminated
  - English ‘shock’ → [sokk], \*[sok]
- Hungarian does not have a requirement for syllables to be heavy



# 3 Segmental adaptation (& level of representation)

- The ‘closest’ sound
- Level of representation:
  - For borrowing language representation
    - Phonological view
    - Phonetic view
  - For input language representation
    - Phonological view
    - Phonetic view

# 3.1 Borrowing language representation

- Phonological view: sieve theory
  - native language acts as a sieve for the foreign language input
  - underlyingly contrastive features are preferentially preserved over non-contrastive features in native phonology
- In Hindi, [distributed] is a contrastive, but [anterior] is not.
  - English alveolar stops ([+anterior, −distributed])
  - → retroflex stops ([−anterior, −distributed])
  - rather than as dental stops ([+anterior, +distributed])

# 3.1 Borrowing language representation

- Phonetic view
  - phonetically salient input characteristics are preferentially preserved over less salient characteristics
  - whether they are underlyingly contrastive or not – is not particularly relevant
- In Madarin, for non-high vowels, height is a contrastive, but backness is not.
  - In words borrowed from English, vowel height is routinely altered, but backness is fairly consistently preserved

## 3.2 Input language representation

- Phonological view: uniform adaptation of a source language phoneme across different contexts
  - Korean: English voiceless stops are consistently adapted as aspirated, even in contexts where the English input is unaspirated, e.g. ‘story’ [sit<sup>h</sup>ori]
- Phonetic view: phonetic details of the source language sounds
  - Thai: English /v/ is mapped to /w/ in the onset and to /p/ in the coda

# 4 Phonotactic adaptation

- 4.1 Epenthesis vs. deletion
  - Preservation Principle: epenthesis should generally be preferred over deletion
- 4.2 Co-occurrence restrictions
  - In Inuktitut, vowels are **allophonically** retracted next to a uvular consonant
    - /iq/ [ɪq]; /uq/ [ʊq]
    - English ‘six’ → [siksi], \*[sɪqsi]
  - In Moroccan Arabic, /i a u/ are **allophonically** lowered and/or retracted to [e ɑ o] when adjacent to pharyngealized consonants
    - [sɪf]; [s<sup>ɸ</sup>ef]
    - French ‘taupe’ [top] → Moroccan Arabic [t<sup>ɸ</sup>ob<sup>ɸ</sup>b<sup>ɸ</sup>-ɑ] ‘rat (fem)’