The Sounds of Korean:
Linguistic and practical guide for Korean pronunciation
Day 2

Dr. Jieun Kiaer and Emily Lord

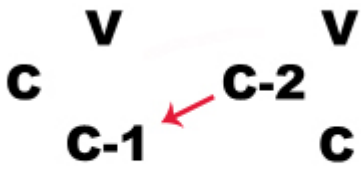
Introduction

- The previous lecture introduced characteristics of the Korean language such as the Hangeul alphabet, the sound inventory, and sound frequency.
  - The phonological rules of liaison and neutralization were also introduced.
- This second lecture will focus on more phonological rules and changes of Korean.

Nasalisation

- **밥 먹었니?** (have you eaten rice/meal?) vs.
- **밤 먹었니?** (have you eaten chestnuts?)
- Non-nasal sound C1 (consonant 1) is nasalised by C2 (consonant 2).

Place of Articulation / Manner of Articulation		Bilabial	Alveolar	Alveolopalatal	Velar	Glottal
Stop (Plosive)	Lax	p (ㅂ)	t (ㄷ)		k (ㄱ)	
	Tense	p^* (ㅃ)	t^* (ㄸ)		k^* (ㄲ)	
	Aspirated	p^h (ㅍ)	t^h (ㅌ)		k^h (ㅋ)	
Nasal		m (ㅁ)	n (ㄴ)		ŋ (ㅇ)	



Examples of Nasalisation:

- ㅂ→ ㅁ: /밥/ in /밥만/ → [**밤**만]‘only rice’
- ㅍ → ㅁ:잎, /잎/ in /솔잎+무뉘/ → [솔**임**무늬] ‘shape of a pine needle’
- ㄱ→ ㅇ: 각 in /사각+모양 /→ [사**강**모양] ‘square’
- ㅋ→ ㅇ:부엌 in /부엌+마루/→ [부**엉**마루] ‘kitchen floor’
- ㄷ→ㄴ: 돋 in /돋+나물/ → [**돈**나물] ‘a kind of herb’
- ㅌ →ㄴ: 밭 in /밭+모양/ → [**반**모양] ‘shape of a field’
- ㅅ → ㄴ: 낫 in /낫+모양/ → [**난**모양] ‘shape of a sickle’
- ㅆ → ㄴ : 샀 in /샀+니?/ → [**산**니] ‘did (you) buy?’
- ㅈ→ ㄴ: 찾 in 찾+는다 ‘search for’
- ㅊ → ㄴ: 낯 ‘face’ 낯 in /낯+모양/ → [**난**모양] ‘shape of face’

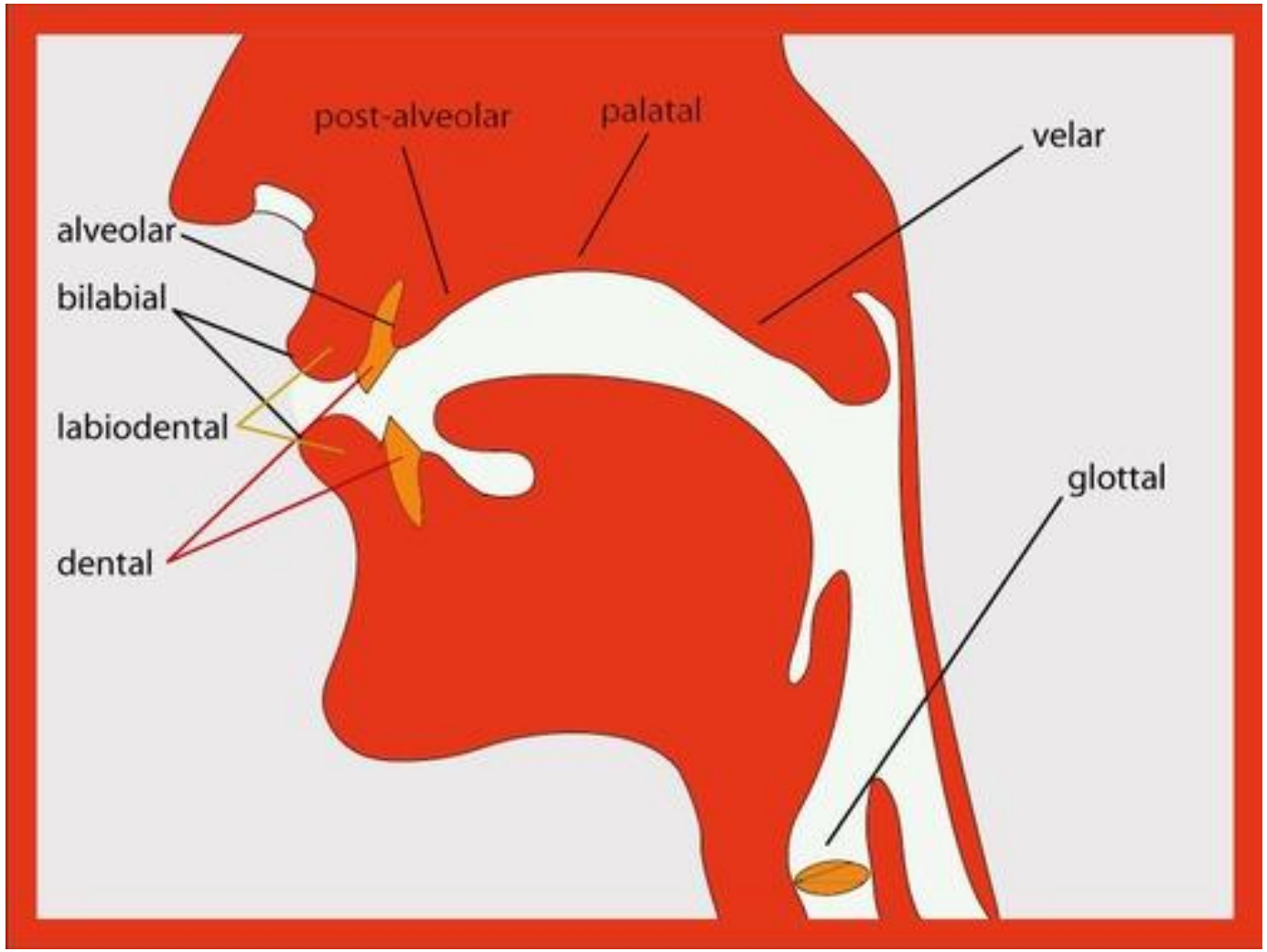
Sound Features and Nasalisation

- Each consonant sound is determined by the place and matter of articulation.
- When a non-nasal sound is nasalised, it always maintains the same place of articulation.
- Therefore, ㅂ/ㅍ→ㅁ (bilabial)

  ㄱ/ㅋ → ㅇ (velar)

  ㄷ/ㅌ/ㅅ/ㅆ/ㅈ/ㅉ/ㅊ →(alveolar)

Places of Articulation

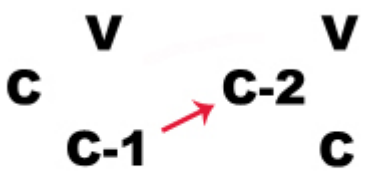


Lateralisation

- Lateralisation is when a non-lateral consonant is pronounced as lateral (ㄹ) consonant when appearing next to a lateral.
- In Korean, nasals assimilate with laterals and undergo lateralisation.
- This is because Korean phonology forbids the /l/-/n/ consonant cluster.

Lateralisation

- Lateralisation of nasals:
- Nasal C-2 is lateralized by preceding lateral C-1.
- C-1 lateral (ㄹ) and C-2 is a nasal (ㄴ)



Lateralisation

- Lateralisation occurs both progressively *and* regressively.
  - Meaning the lateral affects the nasal consonant whether it occurs before or after the nasal.

Progressive Lateralisation

나 in 과일나무 ‘fruit tree’
→ [과일라무]

날 in 겨울날 ‘winter’s day’
→ [겨울랄]

Regresive Lateralisation

신 in 신라 ‘Silla’ → [실라]

전 in 전라 ‘Jeolla’ → [전라]

Lateralisation

- However, sometimes lateralisation occurs backwards, and the /l/ sound becomes an /n/ sound.
- This happens when there is a *word* boundary between the /l/ and /n/.
  - When there is a *morpheme* boundary,

This happens most frequently in Sino-Korean words.

Lateralisation

Morpheme boundary:

권력 (糇缩) /kwʌn- + -ljʌk/ → [kwʌlljʌk] ‘power’

논리 (緰翃) /non- + -li/ → [nolli] ‘logic’

Word boundary:

판단력 (讨縡缩) /(pʰan- + -tan) # -ljʌk/ → [pʰantannjʌk] ‘decision’

음운론 (蜮蚓罰) /(ɯm- + -un) # -lon/ → [ɯmunnon] ‘phonology’

Tensification

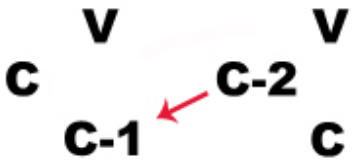
- Tensification occurs when a syllable with a *patchim* (consonant in the coda) is followed by ㄱ, ㄷ, ㅈ, ㅅ, or ㅈ.
- Korean forbids the clustering of obstruents and lax stops, therefore, the C2 is tensified.
  - Remember that all consonants become unreleased stops according to neutralization.

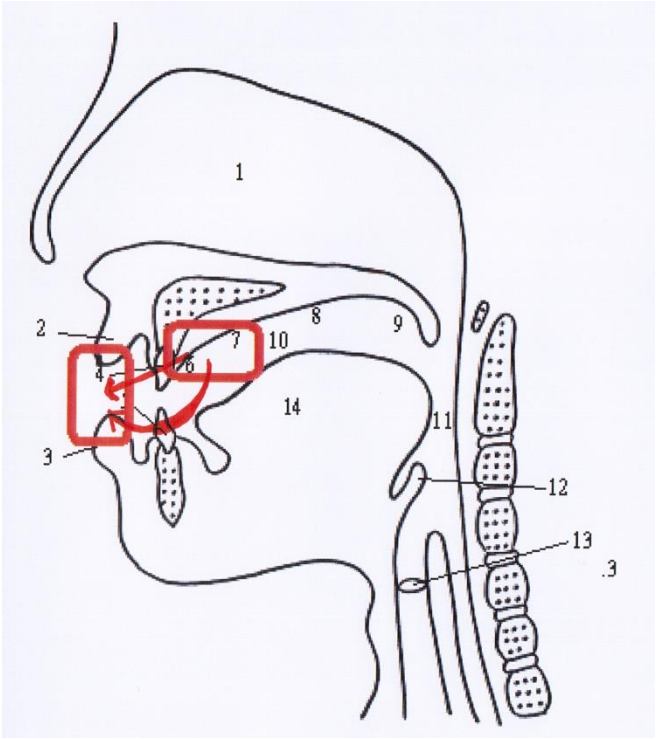
Tensification

- ㅂ → ㅃ
- 밥 in 국밥 ‘soup with rice’
- ㄷ → ㄸ
- 도 in 집+도(even) , 속도 ‘speed’
- ㄱ → ㄲ
- 국 in 콩나물+국 ‘bean sprout soup’

Labialisation

- Labialisation is a form of place assimilation, when a bilabial sound causes another consonant to be pronounced further forward in the mouth
- Labialisation in Korean occurs regressively, so the C2 changes C1.





Labialisation

- Labialisation typically occurs when a nasal sound occurs before a bilabial consonant, whether that consonant is an obstruent or a sonorant.
- Examples of labialization:

ㄴ→ㅁ 신문 /sin.mun/ ‘newspaper’ →심문 [sim.mum]

ㄴ→ㅁ 신발 /sin.bal/ ‘shoe’ → 심발 [sim.bal]

Culture Corner

- Natural-sounding Korean speech is characterized by its prosody and rhythm, along with pronunciation.
- Knowing where to take pauses can help speech to sound more fluent.
- Watch the following clip and pay attention to where the speaker takes short pauses.

https://youtu.be/N_-vcTQqDhg

Culture Corner

- In casual speech and conversation, breaks may be shorter or farther between.

- Reality shows and talk shows can help you adjust to the flow of Korean conversation.

THANK YOU FOR LISTENING!

Q&A

The Sounds of Korean: Linguistic and practical guide for Korean pronunciation 3

Dr. Jieun Kiaer and Emily Lord

INTRODUCTION

The previous two lectures have covered Korean syllable structure, and rules governed by phonological and syllabic constraints.

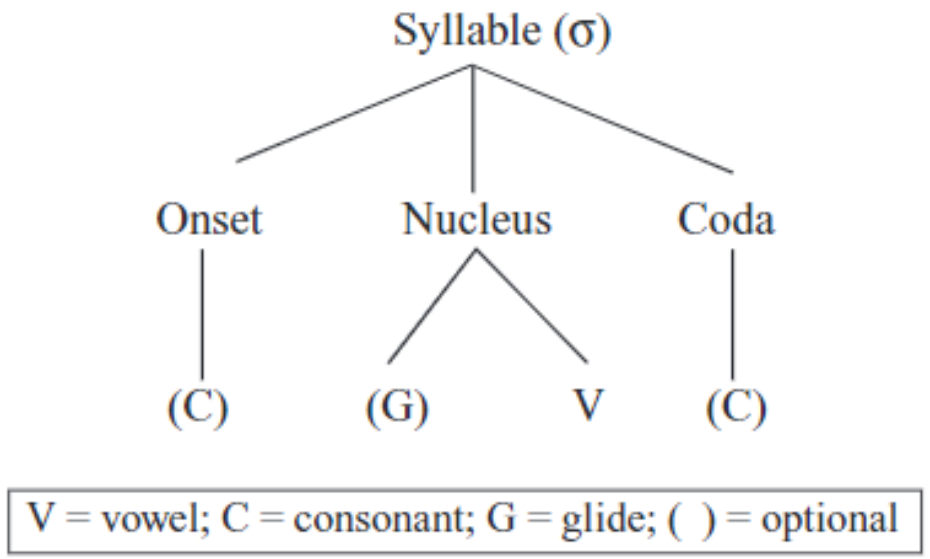
The phonological rules covered so far are:

- Nasalisation
- Tensification
- Lateralisation
- Labialisation
- Neutralisation

This final lecture in the series will introduce a few more phonological rules, and take a deeper look at Korean syllable structure

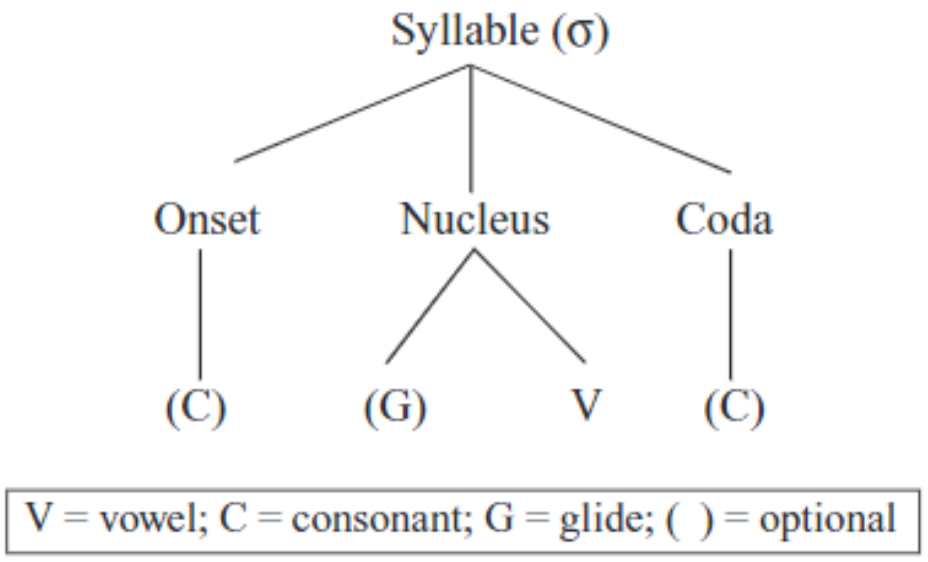
KOREAN SYLLABLE STRUCTURE

- In every language, syllables are made up of an onset, nucleus, and coda.
- Languages have different rules which decide how many sounds can be in one consonant.



KOREAN SYLLABLE STRUCTURE

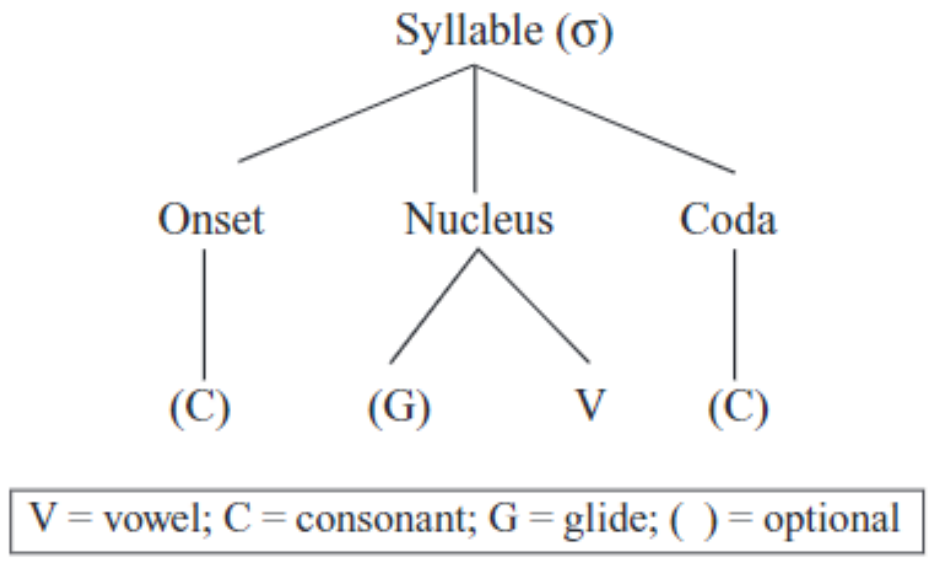
- Korean syllables are made up of, at maximum, four unique sounds.
- Each syllable requires a vowel, and may also contain a consonant and glide at the onset, and a consonant in the coda.



KOREAN SYLLABLE STRUCTURE

- There are also restrictions for which sounds can appear at the beginning or end of a syllable.

- For example [h] (ㅎ) cannot appear at the end of a syllable, and [ŋ] (ㅇ) cannot appear the beginning.



PHONOLOGICAL RULES RELATED TO SYLLABLE STRUCTURE

- Many phonological rules of Korean are influenced by the rules which dictate syllable structure.
- These rules include neutralization of final consonants, and liaison between syllables, as well as consonant cluster simplification.

CONSONANT CLUSTER SIMPLIFICATION

- As said earlier, Korean only allows one consonant sound in the final position.
- Then what about complex consonants like ㄹㅂ, ㄹㄱ and ㄴㅎ?
- The answer is: these clusters are reduced to a single sound.

CONSONANT CLUSTER SIMPLIFICATION

- Consider the following examples:
  삶 /salm/ → [sam] ‘life’
  흙/hɯlk/ → [hɯk] ‘mud’

Although the orthography shows two letters, only one sound is pronounced.

CONSONANT CLUSTER SIMPLIFICATION

- In the consonant clusters ㄹㅅ,ㄹㅌ,ㄴㅈ,ㄹㅎ and ㄴㅎ, the first sound only is pronounced, because there is a preference for sonorance.

- If both sounds (or neither sound) have sonorance, the preference is for non-coronal consonants, as is the case in he clusters ㄹㅁ,ㄹㄱ, ㄱㅅ, and ㅂㅅ.

CONSONANT CLUSTER SIMPLIFICATION

/ls/ → [l]: 외곬 /wɛ- + kols/ → [wɛkol] ‘intently’
/lt^h/ → [l]: 핥는 /halt^h- + -nɯn / → halnɯn → [hallɯn] ‘to lick (adnominal)’
/ntɕ/ → [n]: 앉다 /antɕ- + -ta/ →antɕt * a→ [ant * a] ‘to sit (down)’
/lh/ → [l]: 뚫는 /t * ʊlh- + -nɯn/ → t * ʊlnɯn → [t * ʊllɯn] ‘to punch (adnominal)’
/nh/ → [n]: 많네 /manh- + -nɛ/ → [mannɛ] ‘to be plentiful’b.

/lm/ → [m]: 삶네 /salm- + -nɛ/ → [samnɛ] ‘to boil’
/lk/ → [k]: 흙/hɯlk/ → [hɯk] ‘mud’
/ks/ → [k]: 넋/nʌks/ → [nʌk] ‘soul’
/ps/ → [p]: 값 /kaps/ → [kap] ‘price’

CONSONANT CLUSTER SIMPLIFICATION

Consonant Cluster	Phonetic Realisation	In the syllable final position	Followed by grammatical morphemes, starting with a vowel
ㄳ/ks/	ㄱ/k/	몫 /moks/ → [mok] 'portion'	몫이다 /moks + i + ta/ → [moks*ita]
ㄵ/nʧ/	ㄴ/n/	앉다 /anʧ + ta/ → [ant*a] 'to sit'	앉아 /anʧ + a/ → [anʧa]
ㄶ/nh/	ㄴ/n/	않네 /anh + nɛ/ → [annɛ] 'negating verb'	않아 /anh + a/ → [ana]
ㄼ/lp/	ㄹ/l/	넓다 /nʌlp + ta/ → [nʌlt*a] 'to be broad'	넓어 /nʌlp + ʌ/ → [nʌlpʌ]
	ㅂ/p/	밟다 /palp + ta/ → [papt*a] 'to step on'	밟아 /palp + a/ → [palpa]
ㄽ/ls/	ㄹ/l/	외곬 /wɛkols/ → [wɛkol] 'single track'	외곬이다 /wɛ + kols + i + ta/ → [wɛkols*ita]
ㄾ/ltʰ/	ㄹ/l/	핥다 / haltʰ + ta / → [halt*a] 'to lick'	핥아 /haltʰ + a/ → [haltʰa]
ㅄ/ps/	ㅂ/p/	값 /kaps / → [kap] 'price'	값이 /kaps + i/ → [kaps*i]
ㄺ/lk/	ㄱ/k/	흙 /hɯlk/→ [hɯk] 'mud'	흙이 /hɯlk + i/ → [hɯlki]
	ㄹ/l/	맑게 /malk + kɛ/ → [malk*ɛ] 'clearly'	맑아 /malk + a/ → [malka]
ㄻ/lm/	ㅁ/m/	삶 /salm/→[sam] 'life'	삶이 /salm + i/ → [salmi]
ㄿ/lpʰ/	ㅍ/pʰ/	읊다 /ɯlp + ta / → [ɯpt*a] 'to recite'	읊어 /ɯlpʰ + ʌ/ → [ɯlpʰʌ]
ㅀ/lh/	ㄹ/l/	뚫는 /t*ul + nɯn / → [t*ullɯn] 'to bore(adnominal)	뚫어 /t*ul + ʌ/ → [t*ulʌ]

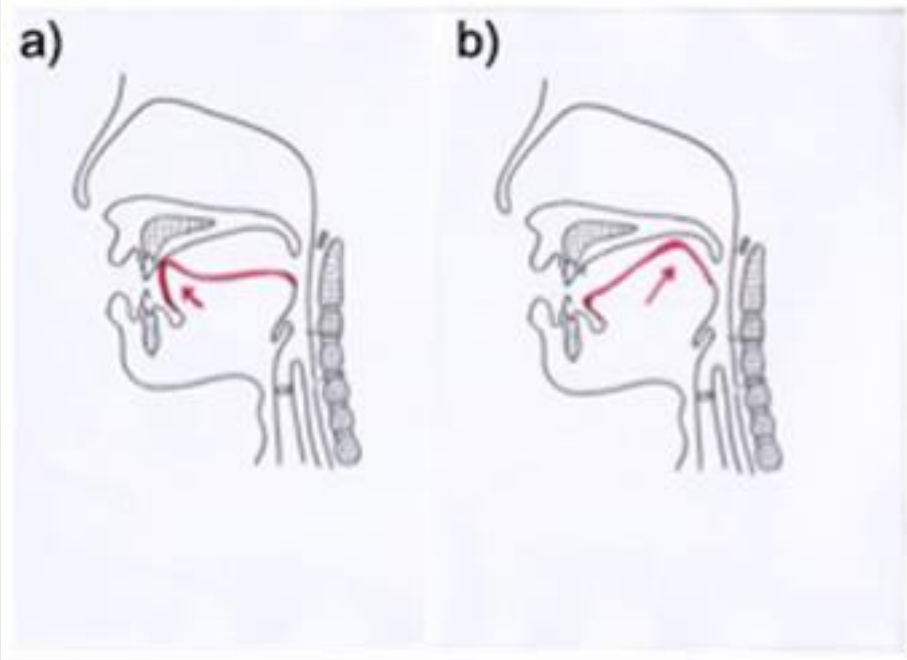
CONSONANT CLUSTER SIMPLIFICATION AND LIAISON

- Although consonant clusters are simplified in the final position, they can be fully pronounced when followed by a vowel.
- This happens frequently when followed by the subj. particle 이, or when verbs are conjugated into the present or past tense.

값이 ‘price’ [kap.si]
앉아 ‘sit (pres.)’ [an. tɕa]

PALATALISATION

- The dento-alveolar sounds ㄷ and ㅌ become one of the uvular sounds ㅈ or ㅊ when followed by 이
- Importantly, this 이 vowel should be the start of a grammatical morpheme (e.g., suffix or subject particle).



PALATALISATION

ㄷ → ㅈ

굳 in 굳이 ‘firmly’ (이 is a adverbial suffix)

닫 in 미닫이 ‘sliding door’ (이 is nominal suffix)

ㅌ → ㅊ

같in 같+이 ‘together’(이 is a adverbial suffix)

밑 in 밑+이 ‘root+Subj’ (이 is a subject particle)

LOANWORD PHONOLOGY

- Korean has adopted a large number of loanwords from English, Japanese and even German and Portuguese!
- Sometimes words enter the Korean language that use non-native sounds, such as /v/ or /f/.

LOANWORD PHONOLOGY

- When Korean adopts loan words, they must change to fit Korean phonology.
- This is how words like ‘coffee’ become 커피, or ‘violin’ becomes 바이올린.

LOANWORD PHONOLOGY

- Correspondence of English consonants to Korean
  - /f/ → ㅍ ‘foul’ → 파울
  - /v/ → ㅂ ‘virus’ → 바이러스
  - /θ/ → ㅅ/ㅆ/ㅌ ‘health’ → 헬스,
    ‘marathon’ →마라톤
  - /ð/ → ㄷ ‘rhythm’ →리듬
  - /z/ → ㅈ ‘zipper’ →지퍼
  - /d͡ʒ/ → ㅈ ‘massage’ →마사지

LOANWORD PHONOLOGY

		English Consonants	Korean Consonants	Examples
Stop	Voiceless	p t k	pʰ tʰ kʰ	paint : 페인트 [pʰɛintʰɯ]
	Voiced	b d g	p/p* t/t* k/k*	ballad : 발라드 [palatɯ] / banana: 바나나 [p*anana]
Fricative	Voiceless	f	pʰ	foul : 파울 [pʰaul]
		θ	s/s*/tʰ	thrill : 스릴 [sɯlil] / maraton : 마라톤 [malatʰon]
		s	s/s*	sports: 스포츠 [sɯpʰotɕʰɯ] / mask: 마스크 [mas*ɯkʰɯ]
		ʃ	s/s*+j	shower : 샤워 [sjawʌ]
		h	h	hall : 홀 [hol]
	Voiced	v	p	virus : 바이러스 [pailʌs*ɯ]
		ð	t	rhythm : 리듬 [litɯm]
		z	tɕ	zipper : 지퍼 [tɕipʰʌ]
		ʒ	tɕ	massage : 마사지 [mas*atɕi]
Affricate	Voiceless	ʧ	tɕʰ	cheese : 치즈 [tɕʰitɕɯ]
	Voiced	ʤ	tɕ	jelly: 젤리 [tɕɛlli]
Nasal		m n ŋ	m n ŋ	mouse : 마우스 [maus*ɯ]
Approximant		r	l	radio : 라디오 [latio]
Lateral Approximant		l	l	league : 리그 [likɯ]
Glide		w j	w j	quiz : 퀴즈 [kʰwitɕɯ]
				yacht : 요트 [jotʰɯ]

LOANWORD PHONOLOGY

Correspondence of English Vowels to Korean

- Korean does not contain ‘off-glide’ dipthongs, found in the English words ‘boy’ and ‘bye’, therefore loanwords with these kinds of dipthongs split the vowel into two syllables.

  ‘date’ →데이트

  ‘violin’ →바이올린

LOANWORD PHONOLOGY

Table 10.2 Vowel correspondence examples between English and Korean

English vowels	English words	Corresponding Korean vowel	Loanword examples
ɪ	hit [hɪt]	i	히트 [hit^{h}ɯ]
e	dress [dres]	ɛ	드레스 [tɯlɛs*ɯ]
æ	manner [mænə]	ɛ	매너 [mɛnʌ]
ɒ	documentary [dɒkjumentəri]	ɑ	다큐멘터리 [tɑk^{h}jumɛnt^{h}ʌli]
ʌ	muffler [mʌflə]	ʌ	머플러 [mʌp^{h}ɯllʌ]
ʊ	cushion [kʊʃn]	u	쿠션 [k^{h}us*jʌn]
iː	league [liːg]	i	리그 [likɯ]
uː	boomerang [buːmərænŋ]	u	부메랑 [pumɛlɑŋ]
ɑː	card [kɑːd]	ɑ	카드 [k^{h}ɑtɯ]
ɔː	fork [fɔːk]	o	포크 [p^{h}ok^{h}ɯ]
ɜː	burner [bɜːnə]	ʌ	버너 [pʌnʌ]
eɪ	date [deɪt]	ɛi	데이트 [tɛit^{h}ɯ]
aɪ	guide [gaɪd]	ɑi	가이드 [kɑitɯ]
ɔɪ	boiler [bɔɪlə]	oi	보일러 [poillʌ]
əʊ	boat [bəʊt]	o	보트 [pot^{h}ɯ]
aʊ	out [aʊt]	ɑu	아웃 [ɑut]
ɪə	earphone [ɪəfəʊn]	iʌ	이어폰 [iʌp^{h}on]
eə	hardware [hɑːdweə]	ɛʌ	하드웨어 [hɑtɯwɛʌ]
ʊə	tour [tʊə]	uʌ	투어 [t^{h}uʌ]

LOANWORD PHONOLOGY

- Loanwords from English are also sometimes introduced to Korean through other languages, particularly Japanese.
- In these instances, the pronunciation changes not just according to Korean phonological rules, but Japanese phonology as well.

LOANWORD PHONOLOGY

- The two pronunciations (Korean and Japanese) may coexist alongside eachother.

- Loanwords via Japanese
  - ‘muffler’ 마플라 vs 마후라
  - ‘foil’ 포일 vs 호일

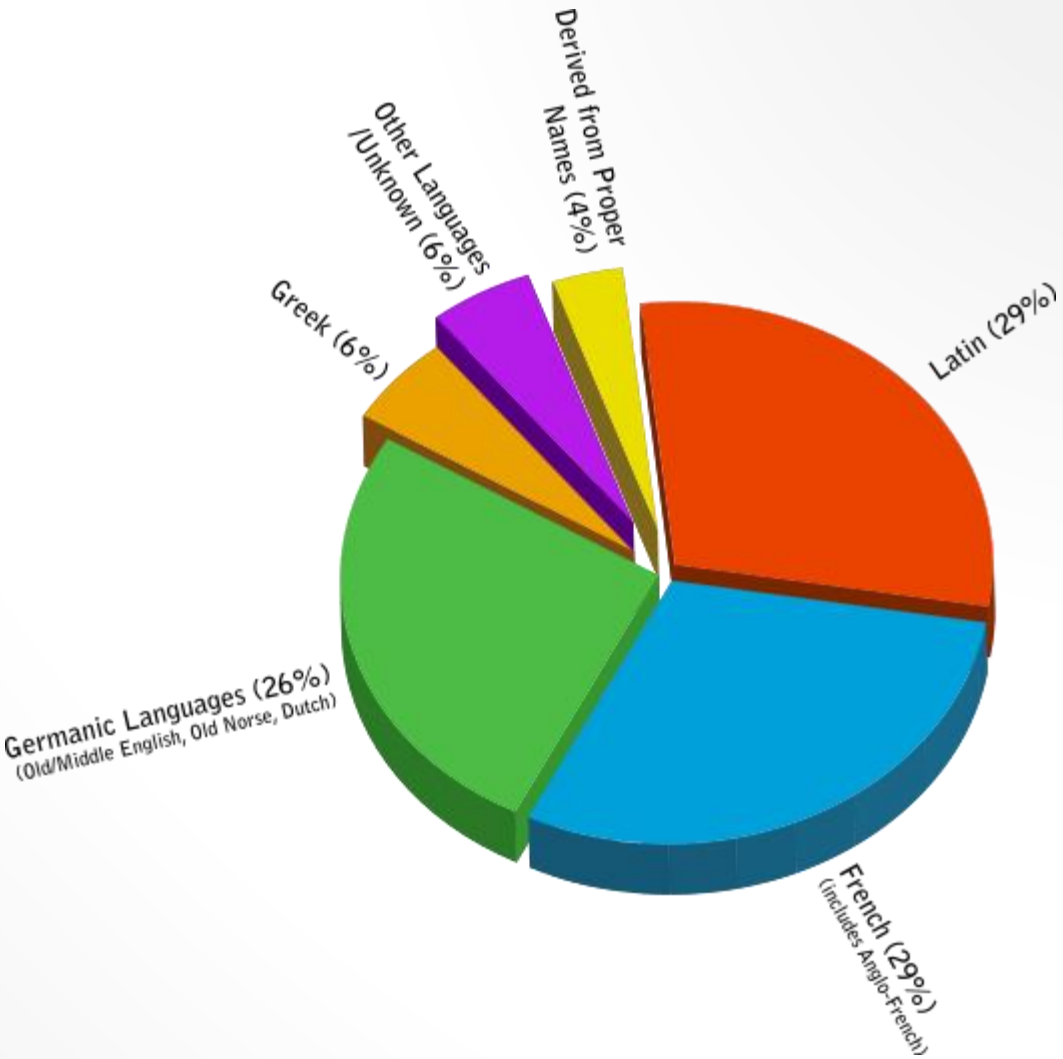
LOANWORD PHONOLOGY

- Sometimes loanwords are adopted because no equivalent word exists in Korean.
- For example:
  - 컴퓨터 ‘computer’
  - 마우스 ‘(computer) mouse’
  - 라디오 ‘radio’
  - 파스타 ‘pasta’
  - 샌드위치 ‘sandwich’

- Sometimes loanwords are introduced to distinguish between two different meanings.
- For example:
  - 치킨 ‘fried chicken’ vs 닭고기 ‘chicken meat’
  - 게임 ‘video game’ vs 경기 ‘sports game’

CULTURE CORNER

- Are loanwords less Korean than native Korean words?
- Is it ‘bad Korean’ to use lots of loanwords when speaking?
- https://youtu.be/i_WPrTiKtAw



THANK YOU FOR LISTENING!

Q&A