

Homework 5

Due Wednesday, October 7, in class

Question 1. Natural classes

List the members of the following natural classes of English sounds.

- a. alveolar fricatives
- b. velar oral stops
- c. non-front lax vowels
- d. voiceless sibilants

Question 2. Phonological processes

Identify the phonological process (give the most general name we have discussed) in each of the following derivations.

- a. little /lɪtəl/ → [lɪɾɪ] b. late bell /leɪt bɛl/ → [leɪp bɛl] c. park /pɑ:k/ → [pʰak]

Question 3. AAVE

Examine the following set of data, and write a rule to describe the derivation of the phonetic forms in AAVE from the ones in SE (*Note: in reality, both the SE pronunciations and the AAVE ones are derived from underlying phonemic representations, not from each other! Just pretend for the exercise*).

That is, determine

- (i) what sound or natural class of sounds is being altered in SE
- (ii) what it's being changed to in AAVE
- (iii) what is the environment in SE in which this happens (in terms of sounds or natural classes of sounds)

In the speech of some AAVE speakers, examples like the following are found:

	bad	pig	gold	legal	goad	Bob	fib	dog	debris	fabulous	loaded
SE	[bæd]	[pʰɪg]	[gould]	[lɪgəl]	[goud]	[bab]	[fɪb]	[dag]	[dɒbri]	[fæbjələs]	[louɾəd]
AAVE	[bæt]	[pʰɪk]	[gould]	[lɪgəl]	[gout]	[bap]	[fɪp]	[dak]	[dɒbri]	[fæbjələs]	[louɾət]

Question 4. Sindhi

The following data are from Sindhi, an Indo-European language of the Indo-Aryan family, spoken in Pakistan and India. Examine the distribution of the phones [p], [pʰ], and [b].

- i. Determine if the three sounds are allophones of separate phonemes, or allophones of the same phoneme.
- ii. What is your evidence?
- iii. Is the relationship among these three sounds the same as in English?
- iv. Why or why not?

- | | | |
|--------------------------|----------------------------|---------------------|
| a. [pənu] 'leaf' | e. [dəru] 'door' | i. [bəju] 'run' |
| b. [vədʒu] 'opportunity' | f. [pʰənu] 'hood of snake' | j. [bənu] 'forest' |
| c. [ʃeki] 'suspicious' | g. [təru] 'bottom' | k. [bəču] 'be safe' |

d. [gədo] 'dull'

h. [k^həto] 'sour'

l. [jəʃu] 'judge'

Question 5. Canadian French

In the dialect of French (an Indo-European language of the Romance family) spoken in Canada, consider the distribution of [t] and [t^s] (a voiceless alveolar affricate) in the data below.

- i. State their distribution, both in terms of the environments, and in terms of the **kind** of distribution this is.
- ii. Determine if they are allophones of one phone or of separate phonemes.

The symbols [y] and [ʏ] represent high, front, rounded vowels, tense and lax respectively. The symbol ~ above a vowel denotes a nasalized version of that vowel.

a. [tu] 'all'

g. [telegram] 'telegram'

b. [abut^si] 'ended'

h. [trɛ] 'very'

c. [tɛl] 'such'

i. [kʏlt^sʏr] 'culture'

d. [tɛb] 'stamp'

j. [minʏt] 'minute'

e. [t^simɪd] 'timid'

k. [t^sy] 'you'

f. [t^sɪt] 'title'

l. [t^sʏb] 'tube'

Make sure you do all the parts of the exercise!

Question 6. Syllabification

- a. A pronunciation of the word “syllabification” is given in a link from course schedule.
 - (i) transcribe this pronunciation
 - (ii) break up your transcription the word into syllables by placing dashes between them
 - (iii) for each syllable, draw the **onset-rhyme/nucleus-coda tree** structure
- b. Why does the word “kettle” have two syllables, and “Celt” just one?
 - i. Explain briefly.
 - ii. Use **sonority diagrams** with asterisks to justify your answer.