

Homework 9 – Phonemes and allophones

Due Friday, May 4

1. Inuktitut phonemes

[q] = voiceless uvular stop

[iglumut]	‘to a house’	[pinna]	‘that one up there’
[ukiaq]	‘late fall’	[ani]	‘female’s brother’
[aiviq]	‘walrus	[iglu]	‘(snow) house’
[aniguvit]	‘if you leave’	[panna]	‘that place up there’
[aglu]	‘seal’s breathing hole’	[aivuq]	‘she goes home’
[iglumit]	‘from a house’	[ini]	‘place, spot’
[anigavit]	‘because you leave	[ukiuq]	‘winter’

- 1.1. List all the minimal pairs of Inuktitut words in the data above (you may not need all of the blanks provided). Then, for each minimal pair, what sounds can that pair be used to demonstrate a phonemic contrast between?

	<u>Minimal pair</u>		<u>Phonemic contrast</u>
EXAMPLE:	[ini] _____	[ani] _____	[i] ~ [a] _____
a.	_____	_____	_____
b.	_____	_____	_____
c.	_____	_____	_____
d.	_____	_____	_____
e.	_____	_____	_____
f.	_____	_____	_____
g.	_____	_____	_____

- 1.2. Based on your answers to 1.1, are you sure that each of the vowels that appears in the data is a distinct phoneme from each other vowel? Why or why not?

2. Korean allophones

[mul]	'water'	[mal]	'horse'
[mulkama]	'place for water'	[malkama]	'place for horse'
[mure]	'at the water'	[mare]	'at the horse'
[pal]	'foot'	[ratio]	'radio'
[pari]	'of the foot'	[ilkop]	'seven'
[rupi]	'ruby'		

- 2.1. The sounds [l] and [r] are in complementary distribution in Korean. Describe the difference between the contexts where they are found; that is, how is their distribution predictable from their context?
- 2.2. Do you think that [r] or [l] is the basic Korean phoneme? Explain your choice.
- 2.3. Write a phonological rule that turns the basic phoneme (which you identified in 2.2) into its allophonic variant, in the context(s) described in 2.1.

3. Canadian raising

For the purposes of this question, the diphthongs [ʌʊ] and [aʊ] are single vowel sounds.

One feature of many strong Canadian accents is ‘Canadian raising’, where certain vowels are pronounced differently than they are by most Americans. Canadian transcriptions of the words below are given; the ones on the left are pronounced differently in Canada than by most Americans, while those on the right are pronounced the same in both countries.

<u>[ʌʊ]</u>		<u>[aʊ]</u>	
[lʌʊt]	‘loud’	[laʊd]	‘loud’
[hʌʊs]	‘(a) house’	[haʊz]	‘house (someone)’
[kʌʊtʃ]	‘couch’	[gaʊdʒ]	‘gouge’

In this exercise, consider whether the difference between [ʌʊ] and [aʊ] is phonemic or allophonic.

- 3.1. Are there any minimal pairs in the data? If so, list them.

- 3.2.
 - a. Are [ʌʊ] and [aʊ] phonemes or allophones? _____
 - b. How do you know whether they are phonemes or allophones?

 - c. If they are allophones, what context does [ʌʊ] appear in, and what context does [aʊ] appear in?