## Homework 5: Dravidian languages Phonetics & Phonology Due Tuesday February 23

(1) Examine the following data from Tamil (a Dravidian language). Note that [t], [d], [n], and [ð] are pronounced as dentals.

[pʊli]	'tiger'	[tanːi]	'water'	[քաւղվʊ]	'garlic'
[kası]	'political party'	[paːmbɯ]	'snake'	[ɪɲʤɪ]	'ginger'
[pandul]	'ball'	[varŋguɪ]	'buy'	[taŋgai]	'younger'
[ігиβадш]	'twenty'	[kaːðɯ]	'ear'	[kayam]	'crow'
[maye]	'son'	[tɪnːɯ]	'can'	$[ta\beta am]$	'penance'
[vanduu]	'cart'	[kʊʈʊ]	'give'	[kartm]	'forest'
[tfandire]	'moon'	[ոεրժա]	'heart'		
[pasi]	'hunger'	[tsendre]	'I went'		

Consider the distribution of the nine allophones [p], [b], [β], [t], [d], [δ], [k], [g], and [ $\gamma$ ]. Propose an analysis that accounts for the distribution of these sounds. Make sure to use phonological terms, reference the data using natural classes, discuss any phonetic motivation, and formalize as a phonological rule or rules. Can you find additional instances of the same pattern(s) in the data?

Then, consider the nasals. You might have noticed something interesting about them already. What might be going on here? Can it be captured as a phonological process?

(2) Examine the data from Malayalam (another Dravidian language) below. State the distribution of long and short vowels, giving evidence, and the needed phonological rule, if relevant. The length diacritic [:] is used here to denote both vowel length (long vowels) and consonant length (double consonants, also called geminates). The length mark always refers to a prolongation of the preceding sound.

[kotːa]	'basket'	[kiţːi]	'got'	[ejːiw]	'house'
[ap:am]	'bread'	[at:am]	'end'	[ciːri]	'shrieked'
[ketːu]	'burnt out'	[kati]	'biting'	[kuţi]	'drinking'
[palam]	'a weight'	[keţːi]	'tied'	[koţːi]	'drummed'
[keɪtɪu]	'heard'	[karti]	'sour gruel'		
[paːla]	'a tree'	[ciri]	'smile'		