Assignment 3: Lexical phonology effects in OT
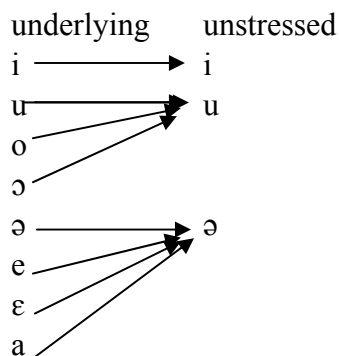due Wed., May 5 in class

1. Give an LPM-OT analysis of the classic Catalan data on the verso (from Mascaró) that have been previously been analyzed as the interaction of three rules: pretonic destressing, unstressed vowel reduction, and postvocalic gliding, with gliding obeying strict cyclicity.

- For destressing, you may assume CULMINATIVITY >> MAX(stress) >> ALIGN(stress,R,wd,R). You may further assume that CULMINATIVITY applies only within words (a phrase may have multiple stresses).

- For vowel reduction, you may assume a constraint REDUCE (>>IDENT(Vfeatures)) that requires the following mapping from underlying to unstressed vowels:

(for a real theory of vowel reduction, see Katherine Crosswhite's book)

- For postvocalic gliding, you may assume a constraint *VV that operates even across word boundaries.

Your focus should be on accounting for <u>where postvocalic gliding does (*awbrír*) and doesn't (*ruinós, ruinusízim*) apply</u>. You may need to assume that /i/ 'and' is a clitic that is never a freestanding word. Depending on what analysis you pursue, you may also need to get creative (and kludgey) about what kinds of I-O faithfulness constraints there can be.

2. Discuss in what types of situations LPM-OT predicts that non-derived-environment-blocking/strict-cyclicity-type effects are possible.

Catalan data

/nɔ́bl+ə/	nɔ́blə	'noble'	/ruín+ə/	ruínə	'ruin'
/nɔ́bl+ɛ́z+ə/	nublɛ́zə	'nobility'	/ruín+ós/	ruinós	'ruinous'
			/ruín+ós+ízim/	ruinusízim	'very ruinous'
/sál i pá/	sál i pá	'salt and bread'			
/pá i sál/	pá j sál	'bread and salt'	/ínst+ə/	ínst+ə	'instates'
			/ínst+ár/	instár	'to instate'
/fɛ́r+u/	fɛ́ru	'iron'	/nó ínst+ár/	nó jstár	'not to instate'
/dé+u/	déw	'God'			
			/óbr+ə/	óbrə	'opens'
/fɛ́r+ik/	fɛ́r+ik	'ferrous'	/óbr+ír/	ubrír	'to open'
/alʒabrá+ik/	əlʒəbrá+jk	'algebraic'	/á óbr+ír/	á wbrír	'in order to open'