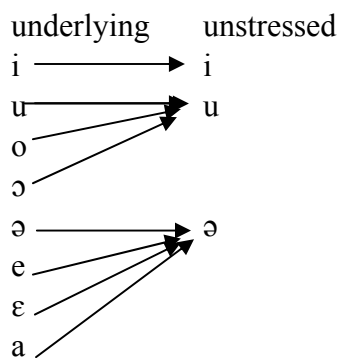**Assignment 5: Catalan revisited**
due Wed., May 19 in class

1. Give an LPM-OT analysis of the classic Catalan data below (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. This time, I've given you more data and corrected an error in the data I gave you originally.

- I've given underlying forms when given or implied by Mascaró. If you want to argue that the underlying forms are wrong, feel free. I included morpheme (+) and word (#) boundaries where Mascaró does. If I wasn't sure what kind of boundary it should be, I just put a space.

- 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 and doesn't 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'
/nɔ́bl+ɛ́z+ə/	nublɛ́zə	'nobility'
/plát/	plát	'dish'
/plat+ɛ́t/	plətɛ́t	'small dish'
/fɛ́r+u/	fɛ́ru	'iron'
/dé+u/	déw	'God'
/fɛ́r+ik/	fɛ́rik	'ferrous'
/alʒabrá+ik/	əlʒəbrájk	'algebraic'
/prudú+í/	pruduí	'to produce'
/prudú+ím/	pruduím	'we produce'
/ɔ́ksid/	ɔ́ksit	'oxide'
/ɔ́ksid+á/	uksidá	'oxidize'
/prudú+í+rá##ɔ́ksid+á+sjó/	pruduiráwksidəsjó	'it will produce oxidation'
/íbrid/	íbrit	'hybrid'
/saúk/	səúk	'elder'
/saúk+é##íbrid+át/	səukéjbridát	?
/íntim/	íntim	'intimate'
/la#íntim+itat/	ləjntimitát	'the intimacy'
	fráŋkujtəljá	'Franco-Italian'
/i tórn+a/	itórnə	'he returns there'
/tórn+a i/	tórnəj	'return there!'
/sál i pá/	sálipá	'salt and bread'
/pá i sál/	pájsál	'bread and salt'
/u tórn+a/	utórnə	'he returns it'
/tórn+a u/	tórnəw	'return it!'
	fézunsál	'make a jump!'
	féwnsál	'to make a jump'
/raón+á+mén/	rəunəmén	'reasoning'
/ruín+ə/	ruínə	'ruin'
/ruín+ós/	ruinós	'ruinous'
/ruín+óz+ísim/	ruinuzísim	'very ruinous'
/ínst+ə/	ínstə	'instates'
/ínst+ár/	instár	'to instate'
/nó#ínst+ár/	nójnstár	'not to instate'
/ɔ́br+ə/	ɔ́brə	'opens'
/ɔ́br+ír/	ubrír	'to open'
/a#ɔ́br+ír/	əwbrír	'in order to open'
/káɔs/	káus	'chaos'
/súpar káɔs/	supərkáus	'superchaos'
/etíɔp/	ətíup	'ethiopian'
/diɔptría/	diuptríə	'diopter'