Problem Set #3: Latin

Due Monday, March 4

Tips for a good OT write-up:

- Always give a clear definition for any constraint that you are using, which specifies the conditions under which that constraint is violated.
- Support any ranking that you propose by giving a ranking argument (i.e., show a tableau that proves that only the ranking you are proposing can get the right answer in a particular case).
- Don't *only* show tableaus. Always explain what you are proposing or showing in ordinary prose form as well. And, as with any phonology (linguistics) write-up, start out by giving a clear, systematic description of the phenomenon you plan to address, before you present your detailed analysis.

In Latin, glides and high vowels are in complementary distribution. That is, whether a segment that is [-cons, +hi, -back, -round] appears as [i] ([+syllabic]) or [j] ([-syllabic]) is predictable, and likewise for [u] versus [w]. For this problem set, you are asked to give an OT analysis of glides and high vowels in Latin, using the constraints discussed in McCarthy & Prince (1993) and Mester & Padgett (1994), plus the additional constraints introduced in class on Monday, Feb 25 and one new constraint that is defined below.

Part I: Use Data Set A to answer this question.

Give a ranking for the following constraints that correctly predicts where input high vowels change into output glides in Latin, and where they do not. (Assume, for now, that high vowels and their corresponding glides differ only in the feature [±syllabic]: glides are [-syll] and high vowels are [+syll].)

Constraints from readings:	*Constraints from class:*	*New constraint:*
ONSET	*COMPLEX$^{\text{Onset}}$	IDENT[syll]
NOCODA	*COMPLEX$^{\text{Coda}}$	'Segments maintain their
PARSE	*LONGV	[±syllabic] value'
FILL	*DIPHTHONG	

Data Set A

Input	***Output***		***Input***	***Output***	
/iekur/	[je.kur]	'liver'	/uenioː/	[we.ni.oː]	'I come'
/iuuenis/	[ju.we.nis]	'young'	/iungoː/	[jun.goː]	'I join'
/auus/	[a.wus]	'grandfather'	/ouis/	[o.wis]	'sheep'
/dieːs/	[di.eːs]	'day'	/mulier/	[mu.li.er]	'woman'
/tenuis/	[te.nu.is]	'thin'	/mutuus/	[mu.tu.us]	'mutual'
/pius/	[pi.us]	'pious'	/piissimus/	[pi.is.si.mus]	'the most pious'

Part II: Use Data Set B to answer this question.

Does the constraint ranking that you have proposed for Part I above correctly predict the winning output forms in Data Set B? Show why your ranking does or does not select the correct output. (Hint: consider the losing candidates *[u.ja], *[aː.u.jus], *[a.u.ja].)

Data Set B

Input	***Output***	
/uia/	[wi.a]	'road'
/aːuius/	[aː.wi.us]	'off the road'
/auia/	[a.wi.a]	'grandmother'

Propose an Alignment constraint (as in Mester & Padgett (1994) that will distinguish between [wi.a] and *[u.ja], etc. Things to think about in identifying the appropriate constraint: What are you aligning with what? At what edge? What kind of elements count as violations when they intervene between the things that you are trying to align? (That is, are violations counted in terms of syllables? segments? moras?) Does your Alignment constraint differ in any interesting way from those that Mester & Padgett consider? Finally, can your Alignment constraint be ranked with respect to any of the constraints you have considered in Part I?