## Problem Set \#4: Latin (Rule-based analysis)

Due Monday, March 25
Or: Submit rough draft by Friday, March 22, and final draft by Wednesday, March 27

Remember that a good phonology write-up includes discussion as well as formalism. Start by giving an explicit description of the phenomenon you want to account for. Also, always state any rules or principles that you propose in prose form as well as in rule notation. If rules must apply in a particular order, show that this is so by giving correct and incorrect derivations. Finally, always support your claims by showing relevant items from the data set.

In Latin, glides and high vowels are in complementary distribution. That is, whether a segment that is [-cons, +hi, -back, -round] appears as [i] or [j] is predictable, and likewise for [u] versus [w].

Propose a rule-based analysis for Latin that correctly accounts for when high vowels do and do not become glides. In your analysis, you may choose to use syllable theories based on Clements \& Keyser (1983), Itô (1989), Broselow (1995), or Zec (1988), but be explicit about your choice.

For the words in Data Set B, your analysis must produce the correct surface forms (crucially, not the ungrammatical forms listed there).

| Data Set A |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{U} \boldsymbol{R}$ | $\boldsymbol{S R}$ |  | $\boldsymbol{U R}$ | $\boldsymbol{S R}$ |  |
| /iekur/ | [je.kur] | 'liver' | /uenio'/ | [we.ni.o'] | 'I come' |
| /iuuenis/ | [ju.we.nis] | 'young' | liungo'/ | [jun.go'] | 'I join' |
| /auus/ | [a.wus] | 'grandfather' | louis/ | [o.wis] | 'sheep' |
| /die:s/ | [di.e:s] | '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' |


| Data Set B |  |  |  |
| :---: | :--- | :--- | :--- |
| $\boldsymbol{U} \boldsymbol{R}$ | $\boldsymbol{S R}$ |  |  |
| /uia/ | [wi.a] | *[u.ja] | 'road' |
| /aiuius/ | [a..wi.us] | *[ai.u.jus] | 'off the road' |
| /auia/ | [a.wi.a] | *[a.u.ja] | 'grandmother' |

