## Homework 5

due Wednesday, May 23rd

## Mid-vowels ~Diphthongs

Spanish exhibits the following alternations between mid-vowels and diphthongs:
(i) $[\mathrm{e}] \sim[\mathrm{ye}] \quad$ e.g., [ben-í-r] 'to come' ~ [byén-e] 's/he comes'
(ii) $[\mathrm{o}] \sim[$ we $] \quad$ e.g., [sol-é-r] 'to tend' $\sim$ [swél-e] 's/he tends'

Notice that the diphthongs are stressed, while the simple mid-vowels are unstressed. Furthermore, note that this alternation occurs in the verb stem (the part in boldface); that is, not in the suffix. This means that these verb stems have two allomorphs. There are at least two ways to account for these alternations: one can either take the vowels as underlying (Hypothesis A) or take the diphthongs as underlying (Hypothesis B):

Hypothesis A: e $\rightarrow$ ye/when stressed and in a verb stem
o $\rightarrow$ we / when stressed and in a verb stem
under this hypothesis, the phonemic representations would be:

$$
\begin{array}{lll}
\text { /ben-i-r/ } & \text { 'to come' } & \text { /ben-e/'s/he comes' } \\
\text { /sol-e-r/ } & \text { 'to tend' } & \text { /sol-e/ }
\end{array}
$$

Hypothesis B: ye $\rightarrow \mathrm{e} /$ when unstressed and in a verb stem
we $\rightarrow \mathrm{o} /$ when unstressed and in a verb stem
under this hypothesis, the phonemic representations would be:

$$
\begin{aligned}
& \text { /byen-i-r/ 'to come' } \\
& \text { /byen-e/ } \\
& \text { /swel-e-r/ } \mathrm{s} / \text { he comes' } \\
& \text { 'to tend' } \\
& \text { /swel-e/ }
\end{aligned} \text { 's/he tends' }
$$

I. Write a paragraph describing how each hypothesis account for the data in (1-6). Be sure to use examples and sample derivations (which should include the stress rule) to make your exposition clear. Don't forget to write this as a stand alone paper.

1. [pod-é-r]
2. [sol-é-r]
3. [kol $\boldsymbol{\gamma}$-á-r]
4. [mo $\beta$-é-r]
5. [ten-é-r]
6. [ben-í-r]

1st-plural
[pod-é-mos]
[sol-é-mos]
[kol $\boldsymbol{\gamma}$-á-mos]
[moß-é-mos]
[ten-é-mos]
[ben-í-mos]
$3 r d$-sing.
gloss
[pwéð-e] 'can’
[swél-e] 'tend'
[kwél $\gamma$-a] 'hang'
[mwé $\beta$-e] 'move'
[tyén-e] 'have'
[byén-e] 'come'
II. Now use the data in (7-14) to choose between the two hypotheses - one should make the correct predictions, while the other will make incorrect predictions with respect to some of these data. Be sure to motivate your choice explicitly and give example and sample derivations.
infinitive 1st-plural 3rd-sing. gloss
7. [kos-é-r] [kos-é-mos] [kós-e] 'sew'
8. [tom-á-r]
9. [kom-é-r]
10. [kompr-á-r]
11. [be $\beta$-é-r]
12. [keð-á-r]
[tom-á-mos]
[kom-é-mos]
[țóm-a]
'take/drink'
13. [kres-é-r]
14. [sek-á-r]
-r] [kompr-á-mos]
[kóm-e]
'eat'
[kómpr-a] 'buy'
[béß-e] 'drink'
[kéð-a] 'remain'
[krés-e] 'grow'
$\begin{array}{ll}\text { [krés-e] } \\ \text { [sék-a] } & \text { 'dry' }\end{array}$
III. Now that you have decided between the hypotheses, consider the data in (15-17) - they should pose a problem for your solution in II. Discuss this problem, but don't attempt to solve it.
infinitive 1st-plural 3rd-sing. gloss
15. [frekwentr-á-r]
16. [eŋkwer-á-r]
[frekwentr-á-mos]
[frekwént-a] 'frequent'
17. [aKyen-á-r]
[eŋkwer-á-mos]
[eŋkwér-a] 'strip'
[aKyen-á-mos]
[aKyén-a] 'alienate'

