

**Problem Set #5: Spanish**

Due Wednesday, April 3

**Or: Submit rough draft by Monday, April 1, and final draft by Friday, April 5**

Remember to turn in a complete, thorough write-up, not a list of short answers. Refer to the "Tips for writing up problem sets" handout on the class web site for more details:  
<http://www.unc.edu/~jlsmith/syllsem/probtips.html>

**Part I. Basic syllable structure in Spanish**

Spanish regular stress falls on the penultimate (pre-final) syllable. However, some words are lexically specified to have stress on the antepenultimate syllable (the syllable before the penultimate syllable).

(1) Regular (penultimate) stress	Antepenultimate stress
[per.ði.ða] 'lost (fem.)'	[pér.ði.ða] 'loss'
[sa.βá.na] 'savanna'	[sá.βa.na] 'sheet'
[pis.tó.la] 'pistol'	[e.pís.to.la] 'epistle, letter'
[sa.lú.βre] 'healthy'	[sé.le.βre] 'famous'

However, for certain combinations of vowels and consonants, antepenultimate stress is not an option. (That is to say, the words in the right column are not actual words of Spanish, but even more importantly, they are *impossible* pronunciations in Spanish, much like [bnk] is an impossible pronunciation in English.)

(2) Regular (penultimate) stress	Antepenultimate stress <i>impossible</i>
[eŋ.kán.to] 'charm, delight'	*[éŋ.kan.to] (not a possible word of Spanish)
[pro.ðúk.to] 'product'	*[pró.ðuk.to] "
[le.tár.go] 'lethargy'	*[lé.tar.go] "
[o.βlón.go] 'oblong'	*[ó.βlon.go] "
[tar.ðán.sa] 'delay, lateness'	*[tár.ðan.sa] "
[re.púl.sa] 'refusal'	*[ré.pul.sa] "
[a.séj.te] 'oil'	*[á.sej.te] "
[kon.sép.to] 'concept'	*[kón.sep.to] "
[a.pláw.so] 'applause'	*[á.plaw.so] "

- Based on these stress facts, give a Zec-style analysis of Spanish syllable structure. Also indicate which of Zec's "Types" Spanish belongs to (based on the data given).

## Part II. An extension

The words in (3) also represent combinations of vowels and consonants where antepenultimate stress is impossible.

(3)	Regular (penultimate) stress	Antepenultimate stress <i>impossible</i>
	[tra.βjé.so] 'mischievous'	*[tra.βjé.so]
	[me.ðjó.kre] 'mediocre'	*[me.ðjó.kre]
	[a.sjá.γo] 'ominous'	*[a.sjá.γo]

However, the words in (4) have antepenultimate stress. (Penultimate stress would also be allowed for words like these.)

(4)	[xe.ó.γra.fo] 'geographer'
	[pú.βli.ko] 'public'
	[a.ris.tó.kra.ta] 'aristocrat'
	[e.lék.tri.ko] 'electric'
	[kan.tá.βri.ko] 'Cantabrian'
	[lá.γri.ma] 'tear[drop]'
	[bo.lí.γra.fo] 'ballpoint pen'

What are the implications of these stress facts for Spanish syllable structure? (Warning: Part II is hard. You will have to go out on a limb and consider syllable structures that Zec does not consider.)

\* \* **You are allowed to stop here** \* \*

---

## Part III. Optional final wrinkle, for the very brave phonologist

The words in (5) also have antepenultimate stress. (Again, regular penultimate stress is also possible for words like these.)

(5)	[o.no.ma.to.pé.ji.ko] 'onomatopoeic'
	[plé.ja.ðes] 'Pleiades'
	[sá.ja.γo] (surname)

How must these words be analyzed?