Linguistics 1 Midterm
Due 1:15 PM Monday, November 7, 2011

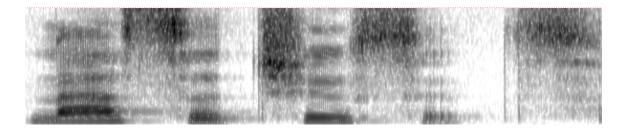
THIS EXAM HAS 4 PARTS. PLEASE BEGIN EACH PART ON A NEW SHEET (please don't use bluebooks). MAKE SURE YOUR NAME IS ON EACH SHEET. IF ANY PART REQUIRES MORE THAN ONE SHEET, PLEASE STAPLE THE SHEETS TOGETHER. This exam is open book, but you must do it on your own, without discussing its contents with anyone.

PART I. PHONETICS 10 points

Which of the following utterances does the spectrogram below represent?

- 1. mashed potatoes
- 2. Massachusetts
- 3. Rumpelstiltskin

Explain how you made your choice, pointing out as many acoustic features in the spectrogram as you can to support your decision.



PART II PHONOLOGY 25 points

Gascon

- 1. Identify the morphemes in the following Gascon data.
- 2. Identify the allomorphs and the environments they occur in.
- 3. Choose base forms for the morphemes and write rules for all the phonological alternations they undergo.

yŋ ka	'a dog'	dys kas	'two dogs'
ym pai	'a father'	dys pais	'two fathers'
yn tabas	'a horsefly'	dys tabases	'two horseflies'
ym brawlu	'a bumblebee'	dyj brawlus	'two bumblebees'
yn dolart	ʻa dollar'	dyj dolarts	'two dollars'
ym mus ε k	'an insect bite'	dyj mus ɛ ts	'two insect bites'
yn nap	'a turnip'	dyj nats	'two turnips'
y awrad 3 e	'a storm'	dys awradzes	'two storms'
yŋ gat	'a cat'	dyj gats	'two cats'
y endret	'a place'	dys endrets	'two places'

PART III COMPARATIVE RECONSTRUCTION 30 points

Below are seven sets of cognates in English, German and Swedish. Word stress in all cases falls on the first syllable. You can ignore the stressed vowels.

- 1. Reconstruct the proto form for each of these sets of cognates. (Write V for the stressed vowels they aren't part of this problem.)
- 2. Write the rules that affected each language.
- 3. State briefly what chronological ordering is necessary, if any, among these rules to get the correct outcome.

English	German	Swedish	Proto Form
dip	tif	dj u p	
lip	lawfən	löpa	
lik	lawx	lök	
wejk	vaxən	vaka	
dεd	tot	död	
rajd	rajtən	rıda	
f ʊ t	fus	fut	
kεn	kεnən	∫ena	
k∧m	komən	koma	

PART IV MORPHO-SYNTAX 35 points

Kharia

Consider the following data from Kharia. (Note: b' is a glottalic consonant) beta b'alu te obyoyog. 'The boy showed the bear' b'alu beta te ñogog 'The bear ate the boy' beta b'alu te yoyog. 'The boy saw the bear' beta te obyoyog. 'He showed the boy' beta b'alu yoyog. 'The boy saw the bear' b'alu beta ñogog. 'The bear ate the boy' b'alu beta yoyog. 'The bear saw the boy' beta kirog obñogog. 'The boy fed the tiger' beta kirog te yoyog. 'The boy saw the tiger' beta b'alu te obñogog. 'The boy fed the bear' kirog b'alu yoyog. 'The tiger saw the bear' b'alu te yoyog. 'He saw the bear' beta b'alu te obñoge 'The boy will feed the bear' *beta te b'alu te yoyog

- a. Identify all the roots and morphological rules illustrated in the data above and report it out as a complete lexicon. Don't forget to give a meaning or function for each root and morphological rule.
- b. The word obyoyog contains three morphemes. Draw a tree showing your morphological analysis for this word. That is, each terminal element of your tree should be a root or an affix and each branching node in your tree should be labeled either as Stem or Word. Indicate the meaning assigned by your analysis to each node of your tree.
- c. Give a set of PS (phrase structure) rules which, together with the words licensed by your morphological analysis, will generate all the sentences above. Deal with optionality via parentheses in PS rules (as we did in class), rather than null words.
- d. Your grammar should generate 2 distinct sentences whose meaning is 'He will see the boy'. Draw the complete syntactic tree generated by your grammar for each of these sentences.