

Linguistics 20

Fall 2006

Hayes et al.

Your name _____

Your TA _____

Day and time of your section _____

Final Exam: Answer Key

1. Phonetic dictation (10 points)

() means optional part of answer; { } means either one ok.

- a. *pentagon* [ˈpɛntəg{ɔ,ɑ,a}n]
- b. *texts* [(ˈ)tɛkstɪs]
- c. *fineness* [ˈfɪnnəs]
- d. *aluminum* [əˈlʊm{ɪ,ə}nəm]
- e. *thought* [(ˈ)θ{ɔ,ɑ,a}t]

2. Syntax I

Explain why the following sentence is ungrammatical.

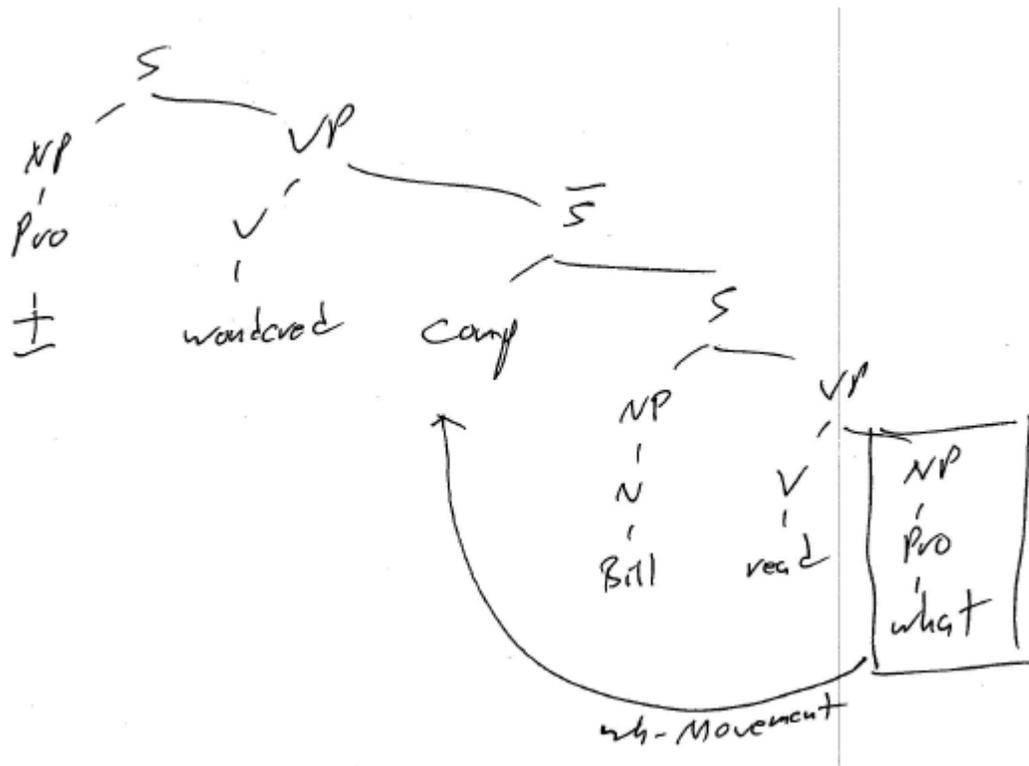
**What should time elapse?*

It's a wh- question, with the wh- phrase *what* extracted from somewhere inside the clause. But from where? It can't have come from subject position, because that is filled with *time*. It can't have come from object position, because *elapse* is intransitive (does not subcategorize for an object). So, there's no deep structure from which the surface structure could have been derived, which correctly predicts its ungrammaticality.

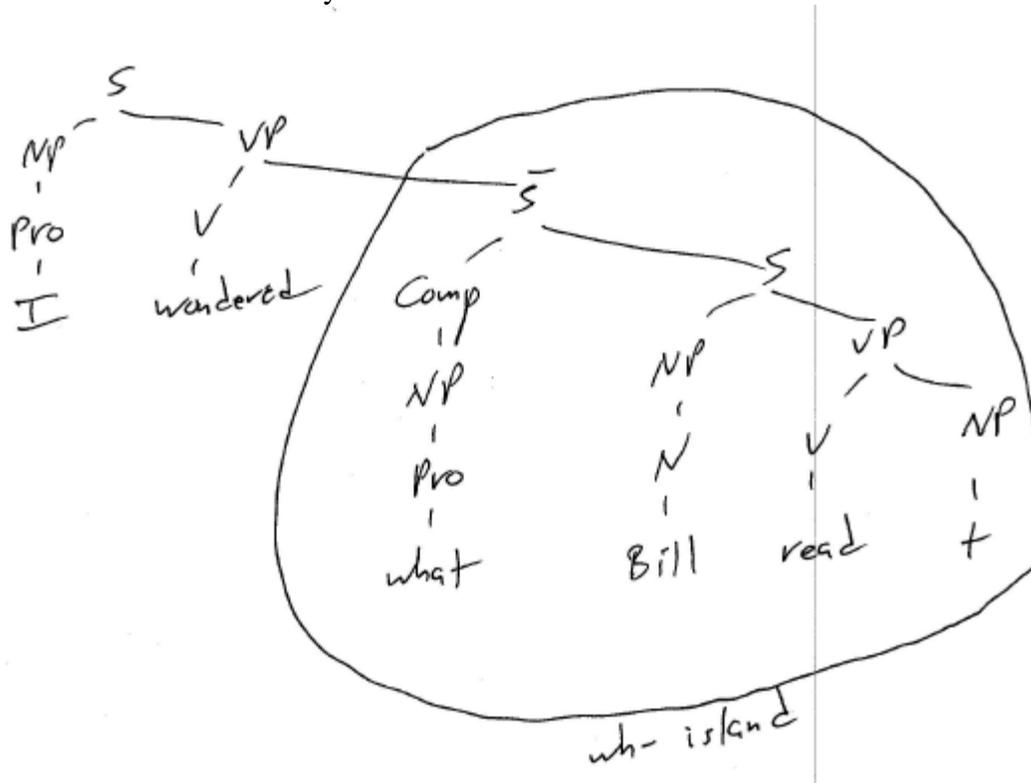
3. Islands

Make up a new sentence that demonstrates that It-Clefting obeys the Wh- Island constraint.

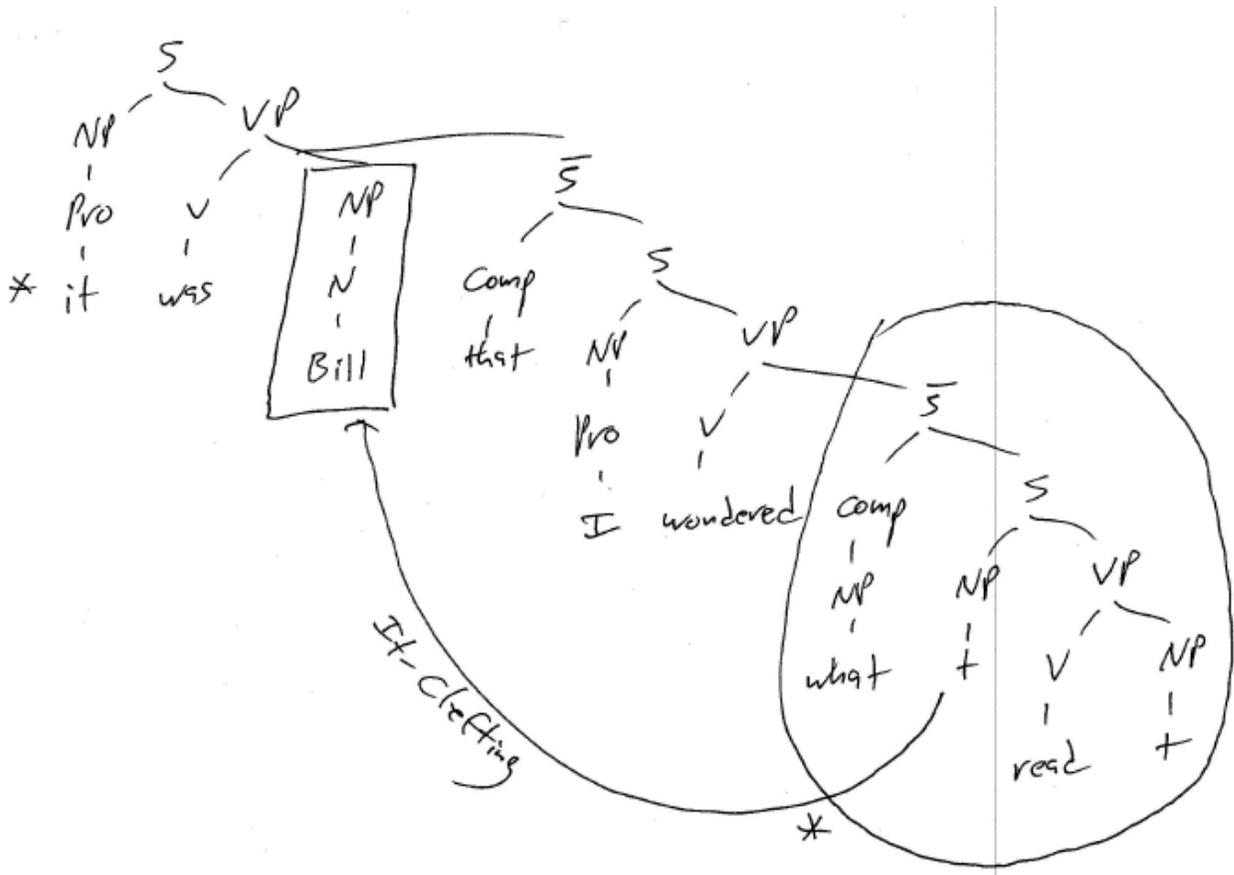
(a) deep structure and Wh- Movement:



(b) the Wh- island as created by movement



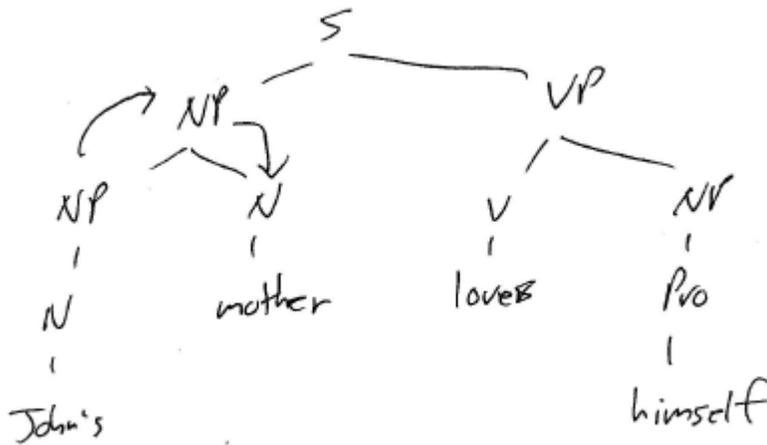
(c) surface structure



4.

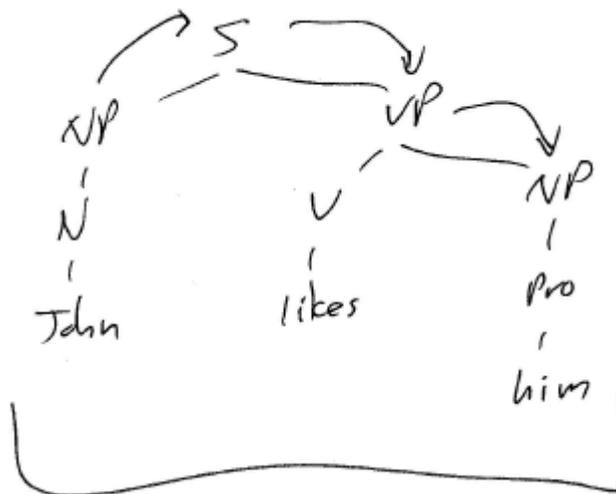
4. Semantics: coreference

(a) Reflexive Interpretation



Here, *John* fails to c-command *himself*, and so cannot be coreferent with it.

(b) Regular Pronoun Interpretation



Here, *John* c-commands its clausemate *him*, and therefore cannot be coreferent with *him*.

5. Semantics: scope

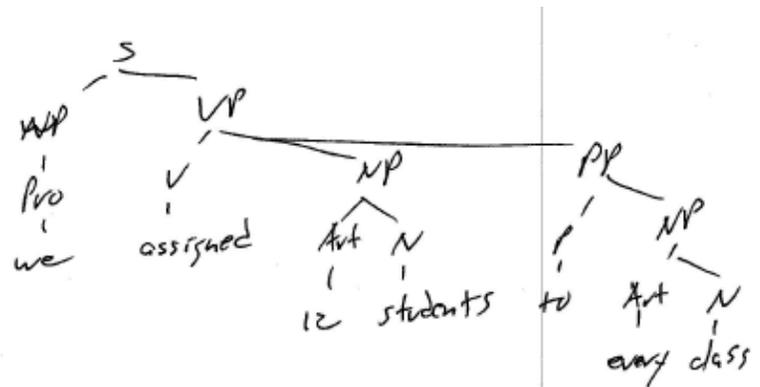
The sentence *We assigned 12 students to every class* is ambiguous, due to scope.

(a) Explain the two meanings clearly in words.

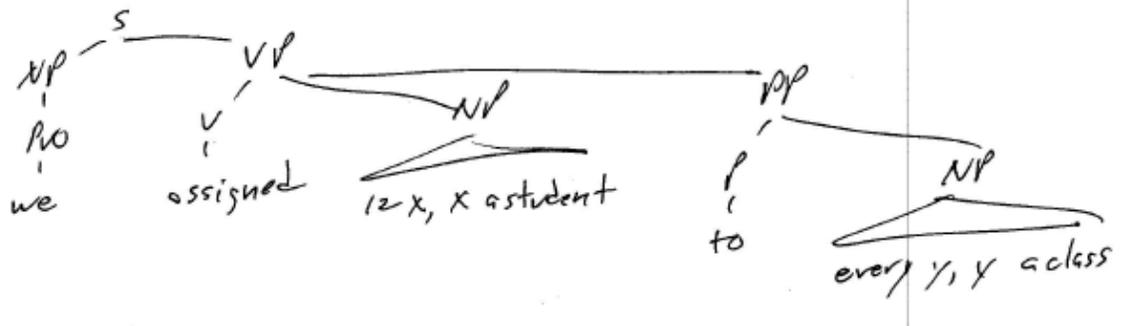
- (i) We picked 12 particular students. For each one, we told that student to go to every class.
- (ii) We went through the list of classes. For each one, we made up a list of 12 students, and assigned those students to that class.

(b) Using the rules of interpretation for quantifiers taught in class (see reference handout), derive both meanings. You may assume that *12* and *every* are Articles. This question requires fairly long derivations; feel free to continue on the back of the page.

Surface structure:

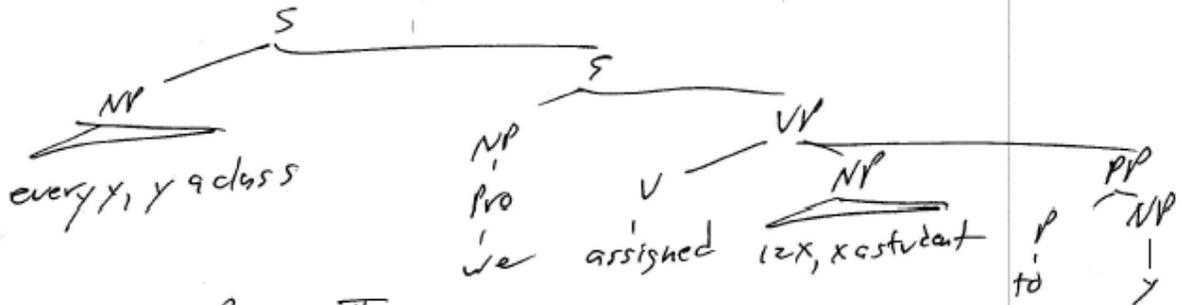


Quantifier Translation:

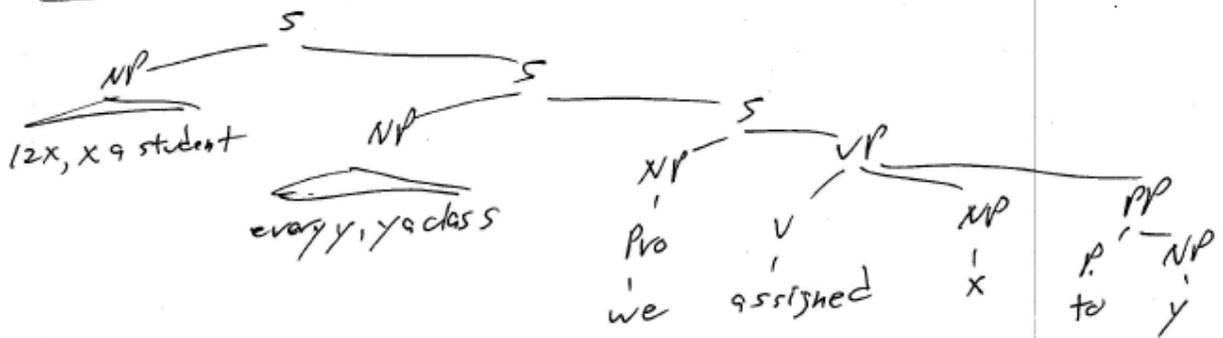


Reading (i)

Quantifier Raising I

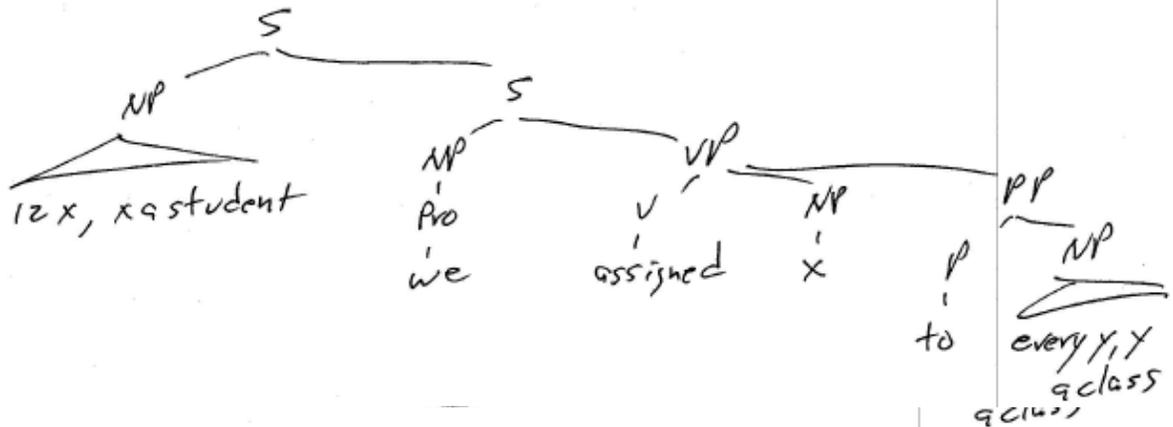


Quantifier Raising II

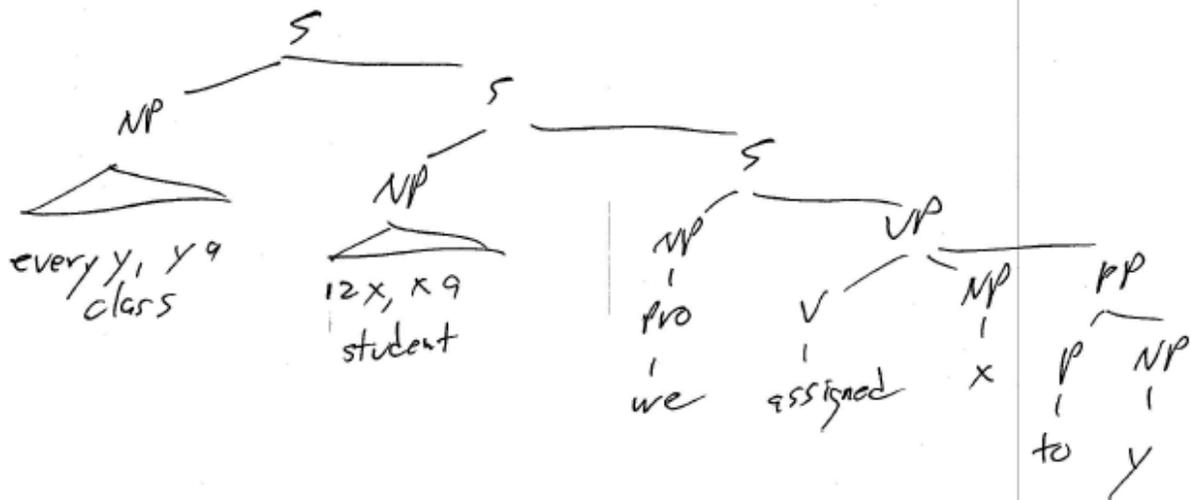


Reading (ii)

Quantifier Raising I



Quantifier Raising II



6. Features

Give the shortest possible set of phonological feature values that can single out the following sets of English sounds. There is a feature chart in the reference section at the end of the exam

1. [ʃ, ʒ, tʃ, dʒ, ɹ, ə] [+palato-alveolar]
2. [oʊ, ɔ, ʌ, ə, ɑ] [+syllabic, +back, -high]
3. [w, u, ʊ, oʊ, ɔ] [+round]

7. Phonemes of Yidjip

(a) Give an outline phonemic description, in words.

The phoneme /u/ has two allophones, [u] and [ʊ]. [ʊ] occurs after palatals and word-finally, and [u] occurs elsewhere.

The phoneme /u:/ has two allophones, [u:] and [ʊ:]. [ʊ:] occurs after palatals and word-finally, and [u:] occurs elsewhere.

The phoneme /i/ has two allophones, [i] and [ɪ]. [ɪ] occurs word-finally, and [i] occurs elsewhere.

The phoneme /i:/ has two allophones, [i:] and [ɪ:]. [ɪ:] occurs word-finally, and [i:] occurs elsewhere.

(b) For each of the four phonemes, choose an underlying form. Briefly justify your choice in words, based on the theory of the phoneme given in the course.

/u/, /u:/, /i/, /i:/

These are the elsewhere allophones. The rules come out much simpler if you start with them, since the other allophones have particular environments.

(c) Write phonological rules sufficient to derive all of the allophones. Give your rules names. (A correct answer will not need more than two rules.)

Postpalatal Laxing

$$\left[\begin{array}{l} +\text{syllabic} \\ +\text{high} \\ +\text{back} \end{array} \right] \rightarrow [-\text{tense}] / [+palatal] ___$$

Final Laxing

$$\left[\begin{array}{l} +\text{syllabic} \\ +\text{high} \end{array} \right] \rightarrow [-\text{tense}] / ___]_{\text{word}}$$

(d) derivations

/ɲuŋgu:t/	/jimur:/	/mulɲa:ri/	Phonemic forms
u	—	—	Postpalatal Laxing
—	—	i	Final Laxing
[ɲuŋgu:l]	[jimur:]	[mulɲa:ɾ]	Phonemic forms

(e) Do your rules need to apply in order? Explain your answer.

No. They apply in non-overlapping environments and do not affect each other's contexts.

(f) What natural classes are given in your rules?

$\left[\begin{array}{l} +\text{syllabic} \\ +\text{high} \\ +\text{back} \end{array} \right]$, [+palatal], $\left[\begin{array}{l} +\text{syllabic} \\ +\text{high} \end{array} \right]$

(You could also mention “output” classes, like the first and third with [–tense] included.)

(g) Here are some of the same data, but adding in the Dative-case forms, in addition to the Nominatives that were given earlier.

...

Of these eight stems, which ones show phonological alternation? Based on the rules you wrote earlier, explain why the alternation occurs in these stems and not others.

1, 15, 16, 49, 51, 53

In these, a high vowel is word-final in the nominative, not so in the Dative, so Word-Final Laxing applies differentially, creating alternation.

In 2 and 31, the final vowel is after a palatal, so because of Postpalatal Laxing it comes out always lax, irrespective of whether there is a suffix.

8. Historical linguistics

(a) Which of the two daughter dialects has diverged from Proto-English (for these particular data)?

British

(b) Give two reasons justifying your answer.

1. Sound change is regular. We can derive British English from Proto-English with a regular sound change of R Dropping, but if American were the dialect that had changed, we would have had to insert [ɹ] in what seems to be a completely random set of locations.

2. Spelling: the medieval scribes who invented English spelling long ago must have been hearing the [ɹ]'s at the ends of words. The spelling came into being long before the British and American dialects split up.

(c) Write a sound change, in standard notation, covering the dialect that changed.

R Dropping

*ɹ → Ø / ____]_{word} in British

(d) Give the correct reconstruction of the words *spa* and *spar* in Proto-English.

<i>spa</i>	* ¹ spa
<i>spar</i>	* ¹ spaɹ

(e) Comment briefly on the sentence “American English represents a degraded form of British English.” Your comment should cover (a) its historical accuracy; (b) who might be expected to make such a statement and why.

(a) Not so: both are descendents of a more ancient dialect (which was, of course, spoken in Britain). To the extent that “degraded” means “affected by sound change,” it is the British dialect that is “degraded” here.

(b) The speaker probably is someone who holds normative views about language, and considers British English to be “superior”, probably for cultural reasons.

9. More Comparative Method¹

(a) What two changes has B undergone? One will involve stress, and can't be readily formalized; just write it down in words. The other change can be written with features. Give the changes names.

Pre-stress Voicing

[+fricative] → [+voice] / ____ $\left[\begin{array}{l} +\text{syllabic} \\ +\text{stress} \end{array} \right]$

¹ Pretend data, very loosely modeled on Verner's Law, a sound change of early Germanic.

Stress Shift

Relocate stress to the first vowel of the word.

(b) In what order did the two changes take place? Explain in words why, and give historical derivations for the words meaning 'lizard' and 'frog', with both right and wrong orders, to illustrate. You can use the other side of this sheet if necessary.

Prestress Voicing had to have applied first; if it didn't, then Stress Shift would have removed all the words to which it could have applied.

Correct derivations (in Language B):

'lizard'	'frog'	
*mu ¹ fu	* ¹ lufu	Proto-AB
v	—	Prestress Voicing
¹ muvu	—	Stress Shift
[¹ muvu]	[¹ lufu]	Language B

Incorrect derivations:

*mu ¹ fu	* ¹ lufu	Proto-AB
¹ mufu	—	Stress Shift
—	—	Prestress Voicing
[¹ mufu]	[¹ lufu]	Language B

The first form is incorrect.