1. Structural Ambiguity

Here are some more, purportedly real, ambiguous newspaper headlines.

A. For each example, explain the two (or more) meanings that arise.

B. Indicate whether the ambiguity is structural, lexical or both, and explain.

C. Draw however many phrase structure trees are necessary to illustrate all the structural ambiguities in each headline.

D. Try to do A-C with a straight face!

a. Iraqi head seeks arms
b. Children make nutritious snacks
c. Beating witness provides names
d. Drunk gets nine months in violin case
e. Enraged cow injures farmer with ax
f. Prostitutes appeal to Pope
g. Teacher strikes idle kids
h. Teller stuns man with stolen check
i. Ban on exotic dancing on mayor's desk
j. High school dropouts cut in half
k. Study cites increase in disabled services
2. Ungrammatical or what?!??!

In my opinion, each of the following sentences would strike most English speakers as "strange" in some way if uttered in any ordinary conversation, though they very well may be grammatical and interpretable given a rich enough context. If you disagree with this assumption for any particular example, please feel free to express and justify your disagreement.

A. Why does each of these sentences sound strange? Possible answers:

- Grammatically ill-formed (ungrammatical)
- Semantically anomalous (doesn't make sense, though fully grammatical)
- Structurally ambiguous
- Lexically ambiguous
- Sociolinguistically anomalous (e.g., an inappropriate mix of variants of English)

B. Draw phrase structure trees for examples a. and b.

a. Colorless green ideas sleep furiously.

b. They decided to go yesterday tomorrow.

c. Flying planes can be dangerous.

d. I resemble that remark.

e. I'm gonna the library.

f. My father is resembled by me.

g. Now your English grammar books bring.

h. Chomsky takes up a foot on my bookshelf.

i. The apple ate Eve.

j. They are moving sidewalks.

k. This drill is boring.

l. Where did I do with my keys?
3. Semantic headship in noun phrases

Circle the "semantic head" of each of the following noun phrases. If you have doubts about any particular example, or if you think there are two answers, explain the difficulties.

a. the Queen of England's crown
b. a bunch of flowers
c. a lot of apples
d. the attorney general of the United States
e. a sensitive but not too brilliant boy friend
f. a decorated camel-litter, which carried the daughters of the sheikh
g. a hole in the wall
h. a tall, spare, weatherbeaten man of few words
i. the tribal equivalent of regimental colours
j. a large number of people
k. one of my best friends
l. the entrance to the building
m. tons of homework
n. three tons of bricks
4. Tests for constituency

Each of the following sentences contains several multi-word constituents.

A: Bracket as many multi-word constituents as possible (your brackets do not need to be labeled). Remember that constituents may be nested within other constituents. Here is an example:

a. [[I [can't [compete [with you] physically ]], and [you ['re [no match [for [my brains]]]]]]]

B. For each sentence, choose one multi-word constituent and prove that it is a constituent by one or more tests for constituent structure described in Chapter seven. One major test per constituent is enough, but if you can't come up with any major tests, two secondary tests will be good enough for this exercise.

b. The winning side would have paid you much better.

c. Merry and Pippin are leading the orcs away from Frodo.

d. I can see the Statue of Liberty already!

e. American girls would seriously dig me with my cute British accent.

f. He roped himself a couple of sea turtles.

g. A woman's heart is a deep ocean of secrets.

h. The best thing you have going for you is your willingness to humiliate yourself.
5. Invent your own utterances

Try to think of novel, grammatical strings (i.e., different from those mentioned in your class, in other exercises, or in the textbook) that meet the following criteria:

a. A sentence that is three ways ambiguous.

b. A sentence that is structurally ambiguous, but which contains no lexical ambiguities.

c. A sentence that has one or more lexical ambiguities, but which is not structurally ambiguous.

d. A sentence that contains three phrasal category nodes.

e. A sentence that contains seven phrasal category nodes.

f. A sentence that contains six unique lexical category labels (i.e. repetitions of the same label count as one).

g. A noun phrase that contains another noun phrase within it.

h. A verb phrase that contains another verb phrase within it.

i. A sentence in which the Subject follows the verb.

j. A sentence in which the Object precedes the verb.

k. A sentence of at least three words in which a full lexical verb comes first.

l. A sentence in which the Object precedes the verb and the Subject follows (this is possible, but pretty limited).

m. A sentence that contains four auxiliaries in a row.
6. Parse this 1!

Inspired by John Blatz and Jason Eisner

The following sentence, though bizarre and deliberately confusing, is perfectly grammatical:

"The weasel that the dog that trees the cat thinks loves smiles eats skins."

Answer the following questions. In some cases, the answer may be "nothing in this sentence".

a. What is the Subject of this sentence? (Give a single-word answer.)
b. How many verbs are there in the sentence?
c. What trees what?
d. What thinks what?
e. What loves what?
f. What smiles?
g. What eats what?
h. What skins what?
i. What is the main Predicate of this sentence?
7. Parse this 2!

The following sentence, though bizarre and deliberately confusing, is perfectly grammatical:

"The cheese the mouse the cat the dog the man the woman the children loved saw beat chased caught ate was rotten."

Answer the following questions. In some cases, the answer may be "nothing in this sentence".

a. What is the Subject of this sentence? (Give a single-word answer.)
b. How many verbs are there in this sentence?
c. What loved what?
d. What saw what?
e. What beat what?
f. What chased what?
g. What caught what?
i. What ate what?
j. What was rotten?
k. What is the main Predicate of this sentence?

Extra credit: Draw a tree diagram of this sentence: