Homework 4

Part 1: Getting comfortable with phrase structure rules

Consider the following tree:

(1)  
  TP  
  / \  
 DP  T'  
 /   \  
 D   NP  T   VP  
 |    /   |    / 
 these AP  will AdvP  VP  
 |  |    |  |    |  
 glowing berries quickly V  DP  
 |  |    |  |    |    |  
 heal D  your AP  NP  
 |  |    |    |    |    |  
 upset tummy

**Part 1:** Write the phrase structure rules (PSR) that generate this tree. For the T’ level, treat it the same as you would a normal node. For example, the phrase structure rule for TP is TP → DP T’

**Part 2:** For each node with a category (i.e. everything except the words themselves), list the nodes that it c-commands.

Part 2: Trees

Draw a tree for the following sentence (*but* is a conjunction of the category Conj):

(2) My son is a good boy but puts ketchup on his hotdogs

For the following strings, say whether they are a constituent or not. Justify your answer with a constituency test. If it is a constituent, name its syntactic category.

1. a good boy but puts ketchup on his hotdogs
2. ketchup on his hotdogs
3. is a good boy
4. my son is
5. on his hotdogs
6. but puts ketchup on his hotdogs
Part 3: Syntactic Ambiguity

For each of the following newspaper headlines, indicate whether the headline is (i) structurally ambiguous, (ii) lexically ambiguous (i.e. two words just happen to have the same pronunciation but mean different things), or (iii) a mixture of both. In each case, paraphrase the possible meanings and draw their corresponding trees (to the best of your ability; I’m looking for structural differences, not for details of lexical categorization – in other words, the labels of the nodes don’t matter so much as the constituency you assign).

(3)  a. ENRAGED COW INJURES FARMER WITH AX
    b. BEATING WITNESS PROVIDES NAMES
    c. STOLEN PAINTING FOUND BY LOCAL MANIAC
    d. COLUMBIANS APPEAL TO POPE