1 Trees

Draw trees for the following sentences, using the rules of Chapter 3, with the following rules replacing the NP rule and the VP rule:

\[
\begin{align*}
\text{NP} & \rightarrow \left( \left\{ \frac{\text{D}}{\text{NP}} \right\} \text{(AdjP}^+)\text{(NP}^+)\text{N (PP}^+)\text{ (CP) (PP}^+) \right) \\
\text{VP} & \rightarrow \text{(AdvP}^+)\text{V} \left( \left\{ \frac{\text{AdjP}}{\text{NP}} \right\} \text{(NP) (PP}^+)\text{ (CP) (AdvP}^+)\text{(NP}^+)\text{(AdvP}^+)\text{(PP}^+)\text{(AdvP}^+) \right)
\end{align*}
\]

Notice that NPs are introduced in 3 places in the modified VP rule. This allows for examples like the following, which has three NPs.

(1) John gave Mary a book quietly last Tuesday.

Make sure your trees are readable whether you draw them by hand or with a computer. Readability considerations many of you have ignored in your homeworks include (a) size of the tree and the size of the print in the tree; (b) how dark the pencil you use is; and (c) reasonably spaced layout of the tree. If you draw your tree illegibly, you will receive no credit for it. Please use the tree website if you are having trouble drawing legible trees.

If you draw your tree by hand, draw it on a separate piece of paper as many times as it takes to resolve your layout issues. Then copy it to your
final version neatly. Do not use any triangles in these trees. At all. You will be marked off for every node you omit by using a triangle.

If you posit a word with white space in it, put quotation marks around the proposed lexical item. For example, a tree claiming that John Smith is a noun would look like this:

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N

'John Smith'
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However, if you treat phrases that have a syntactic analysis, such as too happy, as single words, you will lose points.

If you do not know the part of speech of a word, consider the fact that this is a take home midterm. Do a Google search and get examples of the usage of the word. Look here for further advice.

You do not have to give any syntactic arguments in this section but, before drawing your trees, you should make sure that the things your trees claim are constituents are in fact constituents. If an example is ambiguous, draw a tree for one of the readings but give an unambiguous paraphrase of the reading you are drawing the tree for. A paraphrase of a sentence S is another sentence that has the same meaning as S. It is not a partial clue as to the meaning. Thus, for Cow injures farmer with axe, Cow uses an axe to injure farmer is a paraphrase, but The cow has the axe is not. Paraphrases should not themselves be ambiguous. Thus, Cow uses an axe to injure farmer is better than Cow injures farmer using an axe, because Cow injures farmer using an axe has the same ambiguity as Cow injures farmer with axe.

(1.1) The report that the New York firm is closing its doors provoked widespread disbelief.
(1.2) Disaster relief officials may call on this country’s largest insurance brokers for help
(1.3) It is the first major sign of the long-awaited consolidation of the European insurance industry.

2 Parts of speech

(2.1) Assign parts of speech in the following sentence. Assume that nouns may be modified by nouns.
(2) He was arrested on three other occasions in the 60s for bodily assault and unlawful confinement, for real estate fraud and forgery of private documents, and for extortion.

(2.2) Choose two words from the previous example. For each word give one morphological argument and one syntactic argument for the part of speech you claimed the word has (4 arguments in all). And one or both of the two words should be a non-noun.

3 Complements, Adjuncts, and Xbar trees [ch. 6]

(3.1) Consider the following sentence, used in the tree-drawing section above:

(3) It is the first major sign of the long-awaited consolidation of the European insurance industry.

Consider the following argument.

It is impossible for of the long-awaited consolidation and of the European insurance industry to both be complements in this example, since no head takes two complements. Therefore one or both of them must be adjuncts.

Write a few sentences evaluating this argument, and then come up with an independent argument of your own that the of-PP following the noun sign is a complement or an adjunct. Then draw the tree for this sentence in a way that is consistent with the analysis you argued for.

(3.2) Draw an Xbar tree (Ch. 6) for the following sentence:

(4) Morishita’s managing director said that they would prefer a company with a better reputation.

(3.3) Here are the Xbar rules you can use:
4 Binding Theory

Each of the following sentences has a pair of coindexed NPs. Consider each sentence and do the following:

1. Draw a tree according to the rules of Chapter 3, with the following rules replacing the NP rule and the VP rule:

   \[
   \begin{align*}
   \text{NP} & \rightarrow \left\{ D \right\}_{NP \text{'s}} (AdjP^+) (NP^+) (PP^+) (CP) (PP^+) \\
   \end{align*}
   \]

   Note your trees should have indices (is, js, and ks) consistent with the indices you are given below.

2. Find all the Binding theory violations in each of the following sentences, if any, and state what principle is being violated. Explain what the violation is (Principle A, B, or C), what NP causes it, and what the Binding domain is, if the Binding domain is relevant to the principle you’re invoking. Note: No judgments are given, but don’t draw any
conclusions from that. That is, don’t assume the sentences are grammatical because there is no judgment given, and don’t assume they are grammatical or ungrammatical because your own judgments say so. Just tell us what the Binding Theory says.

(4.1) [That lewd picture of him] really embarrassed Fred.
(4.2) Alice reported [John’s picture of him] to [the web master].
(4.3) I gave him [that picture of John].
(4.4) I gave John [that picture of him].
(4.5) Sue told himself that John was a fool.

5 Phrase structure rules

(5) A kasira.
   He cried
   “He cried.”

(6) Den ye ji min.
   child PAST water drink
   “The child drank water.”

(7) N sonna a ma.
   I agreed it to
   “I agreed to it.”

Answer the following questions about Bambara. Do not break apart words in your analysis.

5.1) Do you need a T category in Bambara? Why or why not?
5.2) Do you need a D category in Bambara? Why or why not?
5.3) What is the NP rule for Bambara? (You do not need and AdjPs or PPs in the rule).
5.4) What is the PP rule for Bambara?
5.5) Can you have a VP rule for Bambara? (The VP rule must exclude the subject and include the object). If you can have a VP rule, write one. If not, explain why.
5.6) What is the TP rule for Bambara?
5.7) Draw trees for (5), (6), and (7), using your rules.